### APPENDIX B

### **GLOSSARY OF TERMS**

# A

**Acceptance** The act of an authorized representative of the government by which the government, for itself, or as agent of another, assumes ownership of existing identified supplies tendered, or approves specific services rendered, as partial or complete performance of the contract on the part of the contractor.

**Accounts Payable** Amounts owed on open accounts, e.g., materials and services received, wages earned, and fringe benefits unpaid.

**Accounts Receivable** Amounts due from debtors on open accounts. Under appropriated funds, amounts due from debtors for reimbursements earned or for appropriation refunds due.

**Accrual Accounting** The basis of accounting whereby revenue is recognized when it is realized and expenses are recognized when incurred, without regard to time of receipt or payment of cash.

**Acquisition** The conceptualization, initiation, design, development, test, contracting, production, deployment, logistic support (LS), modification, and disposal of weapons and other systems, supplies, or services (including construction) to satisfy DoD needs, intended for use in or in support of military missions.

#### Acquisition Category (ACAT)

<u>ACAT I</u> programs are Major Defense Acquisition Programs (MDAPs). An MDAP is defined as a program estimated by the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) to require eventual expenditure for research, development, test, and evaluation of more than \$355 million (fiscal year (FY) 96 constant dollars) or procurement of more than \$2.135 billion (FY 96 constant dollars), or those designated by the USD(A&T) to be ACAT I. ACAT I programs have two sub-categories:

- 1. <u>ACAT ID</u> for which the Milestone Decision Authority (MDA) is USD(A&T). The "D" refers to the Defense Acquisition Board (DAB), which advises the USD(A&T) at major decision points.
- 2. <u>ACAT IC</u> for which the MDA is the DoD Component Head or, if delegated, the DoD Component Acquisition Executive (CAE). The "C" refers to Component.

The USD(A&T) designates programs as ACAT ID or ACAT IC.

ACAT IA programs are Major Automated Information Systems (MAISs) or programs designated by the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)) to be ACAT IA. A MAIS is an Automated Information System (AIS) program that is (1) designated by the ASD(C3I) as a MAIS, or (2) estimated to require program costs in any single year in excess of \$30 million (FY 96 constant dollars), total program in excess of \$120 million (FY 96 constant dollars), or total life cycle costs in excess of \$360 million (FY 96 constant dollars). MAISs do not include highly sensitive classified programs (as determined by the Secretary of Defense.) For the purpose of determining whether an AIS is an MAIS, the following shall be aggregated and considered a single AIS: (1) the separate AISs that constitute a multi-element program; (2) the separate AISs that make up an evolutionary or incrementally developed program; or (3) the separate AISs that make up a multi-component AIS program.

ACAT IA programs have two sub-categories:

- 1. <u>ACAT IAM</u> for which the MDA is the Chief Information Officer (CIO) of the Department of Defense (DoD), the ASD(C<sup>3</sup>I). The "M" (in ACAT IAM) refers to Major Automated Information System (MAIS).
- 2. <u>ACAT IAC</u> for which the DoD CIO has delegated milestone decision authority to the CAE or Component CIO. The "C" (in ACAT IAC) refers to Component.

The ASD(C<sup>3</sup>I) designates programs as ACAT IAM or ACAT IAC.

<u>ACAT II</u> programs are defined as those acquisition programs that do not meet the criteria for an ACAT I program, but do meet the criteria for a major system. A major system is defined as a program estimated by the DoD Component Head to require eventual expenditure for research, development, test, and evaluation of more than \$135M in FY96 constant dollars, or for procurement of more than \$640M in FY96 constant dollars or those designated by the DoD Component Head to be ACAT II. The MDA is the DoD CAE.

<u>ACAT IIA</u> programs are Automated Information System programs that do not meet the criteria for ACAT IA, but are designated by the Army Acquisition Executive or Army Chief Information Officer for PM management and Army Major Automated Information System Review Council (MAISRC) review. (Army only)

ACAT III programs are defined as those acquisition programs that do not meet the criteria for an ACAT I, an ACAT IA, or an ACAT II. The MDA is designated by the CAE and shall be at the lowest appropriate level. This category includes less-than-major AISs.

ACAT IV (Army only) ACAT programs in the Army not otherwise designated as ACAT I, II or III are designated ACAT IV. ACAT IV programs are managed by a systems manager within a materiel command as opposed to ACAT I-III programs which are managed by a PM.

<u>ACAT IV (Navy and Marine Corps only)</u> ACAT programs in the Navy and Marine Corps not otherwise designated as ACAT I, II or III are designated ACAT IV. There are two categories of ACAT IV programs: IVT and IVM. ACAT IVT programs require operational test and evaluation while ACAT IVM programs do not.

**Acquisition Decision Memorandum (ADM)** A memorandum signed by the milestone decision authority (MDA) that documents decisions made as the result of a milestone decision review or in-process review.

**Acquisition Deskbook** See Defense Acquisition Deskbook.

**Acquisition Environment** Internal and external factors that impact on, and help shape, every defense acquisition program. Often these factors work at opposite extremes and contradict each other. These factors include political forces, policies, regulations, reactions to unanticipated requirements, and emergencies.

**Acquisition Executive** The individual, within the Department and Components, charged with overall acquisition management responsibilities within his or her respective organization.

Acquisition Life Cycle The life of an acquisition program consists of phases, each preceded by a milestone or other decision point, during which a system goes through research, development, test and evaluation, and production. Currently, the four phases are: (1) Concept Exploration (CE) (Phase 0); Program Definition and Risk Reduction (PDRR) (Phase I); (3) Engineering and Manufacturing Development (EMD) (Phase II); and (4) Production, Fielding/Deployment, and Operational Support (PF/DOS) (Phase III). Although not considered phases, mission need determination comes before Concept Exploration, and disposal occurs at the end of the system's useful life.

**Acquisition Logistics** Technical and management activities conducted to ensure supportability implications are considered early and throughout the acquisition process to minimize support costs and to provide the user with the resources to sustain the system in the field.

**Acquisition Management** Management of all or any of the activities within the broad spectrum of "acquisition," as defined above. Also includes training of the defense acquisition workforce, and activities in support of planning, programming, and budget system (PPBS) for defense acquisition systems/programs. For acquisition programs this term is synonymous with program management.

**Acquisition Managers** Persons responsible at different levels for some activity related to developing, producing, and/or fielding an AIS or weapon system. Includes senior level managers responsible for ultimate decisions, program managers, and commodity or functional area managers.

**Acquisition Phase** All the tasks and activities needed to bring a program to the next major milestone occur during an acquisition phase. Phases provide a logical means of progressively translating broadly stated mission needs into well-defined system-specific requirements and ultimately into operationally effective, suitable, and survivable systems.

**Acquisition Plan (AP)** A formal written document reflecting the specific actions necessary to execute the approach established in the approved acquisition strategy and guiding contractual implementation. (Refer to Federal Acquisition Regulation (FAR) Subpart 7.1 and Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 207.1 and Acquisition Strategy.)

**Acquisition Planning** The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. It is performed throughout the life cycle and includes developing an overall acquisition strategy for managing the acquisition and a written acquisition plan.

**Acquisition Program** A directed, funded effort that is designed to provide a new, improved, or continuing weapons system or automated information system (AIS) capability in response to a validated operational need.

Acquisition Program Baseline (APB) A document that contains the most important cost, schedule, and performance parameters (both objectives and thresholds) for the program. It is approved by the Milestone Decision Authority (MDA), and signed by the program manager (PM) and his/her direct chain of supervision, e.g., for acquisition category (ACAT) ID programs it is signed by the PM, program executive officer (PEO), component acquisition executive (CAE), and defense acquisition executive (DAE).

**Acquisition Reform** An ongoing series of initiatives sponsored by OSD (especially USD(A&T) and DUSD(AR)) to streamline and tailor the acquisition process. Initiatives include statutory and regulatory reform, CAIV, reform of specifications and standards policy, preference for commercial items, electronic data interchange and the use of the IPPD/IPT management philosophy for systems development and oversight.

**Acquisition Reform Day(s)** An annual day or period set aside by the USD(A&T), usually in the spring, when the DoD acquisiton workforce reviews the latest acquisition reform initiatives and policies in conjunction with presentations by senior OSD acquisition officials. The purpose of the stand-down is to ensure that the entire acquisition workforce is aware of new policy initiatives and has the necessary information to implement them.

**Acquisition Reform Stand-down Day(s)** See Acquisition Reform Day(s).

Acquisition Risk See Risk.

**Acquisition Strategy** A business and technical management approach designed to achieve program objectives within the resource constraints imposed. It is the framework for planning, directing, contracting for, and managing a program. It provides a master schedule for research, development, test, production, fielding, modification, postproduction management, and other activities essential for program success. Acquisition strategy is the basis for formulating functional plans and strategies (e.g., test and evaluation master plan (TEMP), acquisition plan (AP), competition, prototyping, etc.) (See Acquisition Plan.)

**Acquisition Streamlining** Any effort that results in more efficient and effective use of resources to design, develop, or produce quality systems. This includes ensuring that only necessary and cost-effective requirements are included, at the most appropriate time in the acquisition cycle, in solicitations and resulting contracts for the design, development, and production of new systems, or for modifications to existing systems that involve redesign of systems or subsystems.

**Act** 1. A bill or measure after it passes one or both Houses of Congress. 2. A law in place.

**Action Officer** The person responsible for taking action on a project, for coordination of all staff activities, and assembling the action package for decision by higher authority.

**Active Repair Time** That portion of down time during which one or more technicians are working on the system to effect a repair. This time includes preparation time, fault location time, fault correction time, and final check-out time for the system.

**Activity** A task or measurable amount of work to complete a job or part of a project.

**Actual Cost** A cost sustained in fact, on the basis of costs incurred, as distinguished from forecasted or estimated costs.

**Actual Cost of Work Performed (ACWP)** The costs actually incurred and recorded in accomplishing the work performed within a given time period.

**Actual Dollars** Expenditures as recorded in prior time periods.

**Actual Time** Time taken by a workman to complete a task or an element of a task.

**Ada** Higher level software language developed for DoD in the late 1970's. Named in honor of the Countess of Lovelace, Augusta Ada Byron, who worked with Charles Babbage's ill-

fated 19<sup>th</sup> century mechanical calculator called the Analytical Engine. The Ada programming language is no longer mandatory for DoD use.

Administrative Contracting Officer (ACO) The government contracting officer who is responsible for government contracts administration.

**Administrative Time** The portion of down time not included under active repair time and logistics time.

**Advance Buy Funding** That part of the procurement funding for an end item that is separately identified in an earlier year as an advance procurement.

**Advance Funding** Budget authority provided in an appropriation act that allows funds to be committed to a specific purpose (obligated) and spent during that fiscal year even though the appropriation actually is for the next fiscal year. Advance funding generally is used to avoid requests for supplemental appropriations for entitlement programs late in a fiscal year, when the appropriations for the current fiscal year are too low.

**Advance Procurement** Authority provided in an appropriations act to obligate and disburse during a fiscal year from the succeeding year's appropriation. The funds are added to the budget authority for the fiscal year and deducted from the budget authority of the succeeding fiscal year. Used in major acquisition programs to obtain components whose long lead-time require purchase early in order to reduce the overall procurement lead-time of the major end item. Advance procurement of long lead components is an exception to the DoD "full funding" policy.

**Advanced Concept Technology Demonstration (ACTD)** A means of demonstrating mature technology to address critical military needs. ACTDs themselves are not acquisition programs, but are designed to provide a residual, usable capability upon completion, and/or transition into acquisition programs. Funding is programmed to support 2 years in the field. ACTD's are funded with Advanced Technology Development (ATD)) funds.

**Advanced Technology Demonstration (ATD)** Projects within the Advanced Technology Development budget activity which are intended to demonstrate technical feasibility and maturity, and reduce technical risks and uncertainties at the relatively low costs of informal processes.

**Advanced Technology Development (ATD)** A budget activity which includes all projects which have moved into the development of hardware for demonstration, proof of technology, and/or technological trade-off purposes. Both ATD's and ACTD's are funded with Advanced Technology Development funds.

**Advocates** 1. The Office of the Secretary of Defense (OSD) and services' overseer whose job is to encourage, monitor, enforce, and report progress in attaining certain disciplines and

goals. Advocates include competition, streamlining, specifications, and other topical issues. 2. Persons or organizations actively supporting and "selling" an acquisition program.

**Affordability** A determination that the life cycle cost of an acquisition program is in consonance with the long-range investment and force structure plans of the DoD or individual DoD Components.

**Agency Acquisition Executive See DoD Component Acquisition Executive (CAE).** 

**Aggregates** The totals relating to the whole budget rather than a particular function, program, or line item. The seven budget aggregates are budget authority, outlays, revenues, deficit/surplus, level of public debt, new direct loan obligations, and new guaranteed loan commitments.

**Allocable Cost** A cost is allocable to a government contract if it: (a) is incurred specifically for the contract; (b) benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or (c) is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.

Allocated Baseline The initially approved documentation describing a configuration item's (CI) functional and interface characteristics that are allocated from those of a higher level CI; interface requirements with other CIs; design restraints; and verification required to demonstrate the achievement of specified functional and interface characteristics. Allocated baseline consists of the development specifications that define functional requirements for each CI. (See Development Specification.)

Allocated Budget See Total Allocated Budget.

Allocated Configuration Identification (ACI) Currently approved performance-oriented specifications governing the development of configuration items (CIs) that are a part of a higher level CI, in which each specification: defines the functional characteristics that are allocated from those of the higher level CI; establishes the tests required to demonstrate achievement of its allocated functional characteristics; delineates necessary interface requirements with other CIs; and establishes design constraints, if any, such as component/part standardization, use of inventory items, and logistic support (LS) requirements.

**Allocation** An authorization, by a DoD component designated official, making funds available within a prescribed amount to an operating agency for the purpose of making allotments (i.e., the first subdivision of an apportionment).

**Allotment** An authorization by either the agency head or another authorized employee to incur obligations within a specific amount. Each agency makes allotments pursuant to specific procedures it establishes within the general requirements of Office of Management

and Budget (OMB) Circular A-34. The amount allotted cannot exceed the amount apportioned. (See Apportionment.)

**Allowance** A time increment included in the standard time for an operation to compensate the worker for production lost due to fatigue and normally expected interruptions, such as personal and unavoidable delays.

**Alternative Systems Review (ASR)** A technical review that may be conducted toward the end of the Concept Exploration (CE) Phase that demonstrates the preferred concept is cost effective, affordable, operationally effective and suitable, and can be developed to provide a timely solution to a need at an acceptable level of risk.

**Analogy Cost Estimate** An estimate of costs based on historical data of a similar (analog) item.

Analysis of Alternatives (AoA) An analysis intended to aid decisionmaking by illuminating the risk, uncertainty, and the relative advantages and disadvantages of alternatives being considered to satisfy a mission need. The AoA shows the sensitivity of each alternative to possible changes in key assumptions (e.g., threat) or variables (e.g., performance capabilites). Part of the CAIV process.

**Analysis of Manufacturing** The review and evaluation of assembly and fabrication processes to determine how effectively and efficiently the contractor's manufacturing operations have been planned or accomplished.

**Anti-Deficiency Act** The salient features of this Act include: prohibitions against authorizing or incurring obligations or expenditures in excess of amounts apportioned by the Office of Management and Budget (OMB) or in excess of amounts permitted by agency regulations; and establishment of procedures for determining the responsibility for violations and for reporting violations to the President, through OMB and to the Congress.

**Appeal Process** A request for reconsideration of an action taken to adjust, reduce, or delete funding for an item during the congressional review of the defense budget (authorization and appropriation).

**Application** The process of selecting requirements that are pertinent and cost effective for the particular materiel acquisition and contractually invoking them at the most advantageous times in the acquisition cycle.

**Applied Research** A budget activity that includes efforts toward the solution of specific military problems, short of major development projects.

**Apportioned Effort** Effort that by itself is not readily divisible into short-span work packages but which is related in direct proportion to measured effort.

**Apportionment** The action by which the Office of Management and Budget (OMB) distributes amounts available for obligation in an appropriation account. The distribution makes amounts available on the basis of specified time periods (usually quarters), programs, activities, projects, objects, or combinations thereof. The apportionment system is intended to achieve an effective and orderly use of funds. The amounts so apportioned limit the obligations that may be incurred. (See Resource Allocation Process (RAP).)

**Appropriation** An authorization by an act of Congress that permits Federal agencies to incur obligations and make payments from the Treasury. An appropriation usually follows enactment of authorizing legislation. An appropriation act is the most common means of providing budget authority (see Budget Authority (BA)). Appropriations do not represent cash actually set aside in the Treasury; they represent limitations of amounts which agencies may obligate during a specified time period.

**Appropriation Limitation** An amount fixed by Congress within an appropriation which cannot be exceeded.

**Appropriators (Appropriations Committees)** The Senate and House Appropriations Committees. They recommend legislation granting funding for federal agencies and also have oversight authority to monitor how funds are spent.

**Approved Programs** The technical and operational, schedule, and quantity requirements reflected in the latest approved Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) acquisition decision memorandum (ADM), or other document reflecting a more current decision of the USD(A&T) or other appropriate approval authority (such as the President's budget, the future years defense program (FYDP), and supporting documentation).

**Approved Project** A cooperative project under Title 22 USC §2767 that has DoD Component approval for implementation, or a cooperative research and development (R&D) project under Title10 U.S.C. §2350a that has the Office of the Secretary of Defense (OSD) approval for implementation, before any formal agreements have been negotiated or concluded and funds are released.

**Architecture** The structure of components, their interrelationships, and the principle guidelines governing their design and evolution over time.

**Armaments** Weapons with lethal capability (e.g., missiles, rifles).

**Armed Services Board of Contract Appeals (ASBCA)** Board established to act as the authorized representative of the Secretary of Defense (SECDEF) or department Secretaries, in deciding appeals under the disputes clause of government contracts.

**Armed Services Committees (Senate and House)** Standing committees of the Senate and House, respectively, the Senate Armed Services Committee (SASC) and House National Security Committee (HNSC), which authorize DoD programs and conduct oversight.

**Arms Export Control Board** An interagency board, chaired by the Under Secretary of State for Security Assistance (Science and Technology), that serves to advise the Secretary of State on matters relating to security assistance program levels and arms transfer policies.

**Arms Transfer** Defense articles and defense services (arms, ammunition, and implements of war, including components, training, manufacturing licenses, technical assistance, related technical data) provided by the government under the Foreign Assistance Act of 1961, as amended.

**Assembly Chart** Portrays the proposed sequence of assembly operations constituting the assembly process in the production of goods that are composed of many components.

**Atmospheric/Off the Wall Estimate** Wild guess (usually a cost estimate) based on experience of the estimator, but without confidence.

**Audit** Systematic examination of records and documents to determine adequacy and effectiveness of budgeting, accounting, financial, and related policies and procedures; compliance with applicable statutes, regulations, policies, and prescribed procedures; reliability, accuracy and completeness of financial and administrative records and reports; and the extent to which funds and other resources are properly protected and effectively used.

**Auditor** Represents the cognizant audit office designated by the Defense Contract Audit Agency (DCAA) or Service audit activities for conducing audit reviews of the contractor's accounting system policies and procedures for compliance with the criteria.

**Authority For Systems Acquisition** The framework granting authority for DoD to develop, produce, and field weapon systems emanates from four sources: the law (legal basis), executive direction (orders), Office of Management and Budget (OMB) Circulars, and the Federal Acquisition Regulation (FAR). The framework guides and grants authority, enables the DoD to conduct business, and is the apparatus for decision making and execution.

**Authorization** An act of Congress which permits a federal program or activity to begin or continue from year to year. It sets limits on funds that can be appropriated, but does not grant funding which must be provided by a separate Congressional appropriation.

**Authorized Representative** Any person, persons, or board (other than the contracting officer) authorized to act for the head of an agency or the Secretary.

**Authorized Work** That effort which has been definitized and is on contract, plus that which definitized contract costs have not been agreed to but for which written authorization has been received.

**Authorizers** (**Authorization Committees**) The standing committees of Congress which have legislative authority, authorize programs, and conduct oversight over agency programs. Authorizers for DoD are the: Senate Armed Service Committee (SASC) and House National Security Committee (HNSC).

**Authorizing Legislation** Legislation enacted by Congress to permit establishment or continuation of a Federal program or agency. Authorizing legislation is normally required before enactment of budget authority.

**Automated Data Processing Equipment (ADPE)** 1. A machine, or a group of interconnected machines, consisting of input, storage, computing, control, and output services, which uses electronic circuitry in the main computing element to perform arithmetic and/or logical operations automatically by means of internally stored or externally controlled programmed instructions. 2. Data processing equipment which directly supports or services central computer operations.

**Automated Information System (AIS)** A combination of computer hardware and software, data, or telecommunications, that performs functions such as collecting, processing, transmitting, and displaying information. Excluded are computer resources, both hardware and software, that are physically part of, dedicated to, or essential in real time to the mission performance of weapon systems.

**Automatic Test Equipment (ATE)** Any automated device used for the express purpose of testing prime equipment; usually external to the prime device (e.g., support equipment).

**Availability** A measure of the degree to which an item is in an operable and committable state at the start of a mission when the mission is called for at an unknown (random) point in time.

Average Procurement Unit Cost (APUC) APUC is calculated by dividing total procurement cost by the number of articles to be procured. Total procurement cost includes flyaway, rollaway, sailaway cost (that is, recurring and nonrecurring costs associated with production of the item such as hardware/software, system engineering, engineering changes and warranties) plus the costs of procuring technical data, training, support equipment, and initial spares.

**Average Procurement Unit Cost (APUC) Objectives** APUC objectives, expressed in constant dollars, are established at Milestone I, Approval to Begin a New Acquisition Program.

Average Unit Procurement Cost (AUPC) See Average Procurement Unit Cost (APUC).

# B

**Backfitting** The addition of new type equipment to the configuration of operating systems or the installation of equipment in production systems which have been delivered without such equipment. Also called retrofit.

**Backlog** That known work input which is beyond the workload capability of an organization or segment of an organization for any given period of time.

**Balanced Line** A series of progressive related operations with approximately equal standard times for each, arranged so that work flows at a desired steady rate from one operation to the next.

**Ball Park Estimate** Very rough estimate (usually cost estimate), but with some knowledge and confidence. ("Somewhere in the ball park.")

**Bank** A planned accumulation of work-in-process to permit reasonable fluctuations in performance times of coordinated or associated operations.

**Bar Chart** The detailed graphical working plan of a part providing sequence and time for the job scheduled ahead and progress to date.

**Base Program** The program described in the future years defense program (FYDP) base file, updated to conform to the budget presented to the Congress. It constitutes the base from which all current year program changes are considered.

**Base Year (BY)** A reference period which determines a fixed price level for comparison in economic escalation calculations and cost estimates. The price level index for the BY is 1.000.

**Baseline** Defined quantity or quality used as starting point for subsequent efforts and progress measurement that can be a technical cost or schedule baseline. (See Performance Measurement Baseline (PMB) and Acquisition Program Baseline (APB).)

**Baseline Comparison System (BCS)** A current operational system, or a composite of current operational subsystems, which most closely represents the design, operational, and support characteristics of the new system under development.

**Baseline Cost Estimate (BCE)** See Program Office Estimate (POE). (Army)

**Baselining** A process whereby all managers concerned collectively agree on the specific description of the program, requirements, funding, and make a commitment to manage the program along those guidelines.

**Basic Ordering Agreement (BOA)** An instrument of understanding (not a contract) executed between a procuring activity and a contractor which sets forth negotiated contract clauses that will be applicable to future procurements entered into between the parties during the term of the agreement. It includes as specific a description as possible of the supplies or services and a description of the method for determining pricing, issuing, and delivery of future orders.

**Basic Research** Efforts typically performed in laboratories as experiments to explore the basic laws of science and their potential application to DoD weapon systems or technology development. Funded under the research, development, test, and evaluation (RDT&E) appropriation.

**Basic Scientific and Technical Information** Information relating to fundamental theories, designs, and data for purely theoretical or experimental investigation into possible military application of the knowledge. It does not include manufacturing knowledge or information on operational or development systems.

**Basis of Issue Plan (BOIP)** Document that establishes the distribution of new equipment and associated support items of equipment and personnel, as well as the reciprocal displacement of equipment and personnel. (Army)

**Best Value** The most advantageous trade-off between price and performance for the government. Best value is determined through a process that compares strengths, weaknesses, risk, price, and performance, in accordance with selection criteria, to select the most advantageous value to the government.

**Biennial Budget** The fiscal year (FY)86 National Defense Authorization Act required the submission of two-year budgets for the DoD beginning with FY88/89. A biennial budget, as currently structured, represents program budget estimates for a two-year period in which FY requirements remain separate and distinct. The Congress, however, still appropriates annual budget authority.

**Brassboard Configuration** An experimental device (or group of devices) used to determine feasibility and to develop technical and operational data. It normally will be a model sufficiently hardened for use outside of laboratory environments to demonstrate the technical and operational principles of immediate interest. It may resemble the end item, but is not intended for use as the end item.

**Breadboard Configuration** An experimental device (or group of devices) used to determine feasibility and to develop technical data. It normally will be configured for

laboratory use only to demonstrate the technical principles of immediate interest. It may not resemble the end item and is not intended for use as the projected end item.

**Break-even Analysis** 1. The study of cost-volume-profit (C-V-P) relationships. 2. The analysis of proposed procurement and facilitization to compare potential costs of establishing a second source with potential savings due to competitive pressure from the second source.

**Break-even Point** 1. In business enterprise, the point at which revenues from sales exactly equal total incurred cost, i.e., Revenues = Variable Costs + Fixed Costs. 2. In decision making such as make versus buy, lease versus buy, etc., it is the point of indifference, meaning that level of activity where either method results in exactly the same cost. These type of break-even decisions often involve making assumptions about levels of activity such as number of units needed.

**Breakout** Execution of acquisition strategy to convert some parts or system components from contractor furnished to government furnished. Rather than having the prime contractor provide from its sources, the government procures items directly, and provides them to the prime.

#### **BRICKBAT** A top priority program.

**Budget** A comprehensive financial plan for the Federal Government, encompassing the totality of Federal receipts and outlays (expenditures). Budget documents routinely include the on-budget and off-budget amounts and combine them to derive a total of Federal fiscal activity, with a focus on combined totals. Also a plan of operations for a fiscal period in terms of estimated costs, obligations, and expenditures; source of funds for financing including anticipated reimbursements and other resources; and history and workload data for the projected program and activities.

**Budget Activity (BA)** Categories within each appropriation and fund account that identify the purposes, projects, or types of activities financed by the appropriation or fund.

**Budget Authority (BA)** Authority provided by law to enter into obligations that will result in immediate or future outlays. It may be classified by the period of availability, by the timing of congressional action, or by the manner of determining the amount available.

**Budget Estimate** Cost estimate prepared for inclusion in DoD budget to support acquisition programs.

**Budget Estimate Submission (BES)** The DoD Component's budget submissions to the Office of the Secretary of Defense (OSD) showing budget requirements for inclusion in the DoD budget.

**Budget Execution** See Execution.

Budget for Work Packages See Work Package Budgets.

**Budget Resolution** See Concurrent Budget Resolution (CBR).

**Budget Year(s)** (**BY**) The year(s) following the current fiscal year (FY), and for which the budget estimate is prepared.

**Budgeted Cost** The sum of the budgets for completed work packages and portions of open work packages, plus the appropriate portion of budgets for level of effort and apportioned effort.

**Budgeted Cost of Work Scheduled (BCWS)** The sum of the budgets for all work (work packages, planning packages, etc.) scheduled to be accomplished (including in-process work packages), plus the amount of level of effort and apportioned effort scheduled to be accomplished within a given time period. Also called the Performance Measurement Baseline.

**Budgeted Cost of Work Performed (BCWP)** A measurement of the work completed (in Earned Value Management terminology). BCWP is the value of work performed, or "earned", when compared to the original plan, that is, the Budgeted Cost of Work Scheduled. The BCWP is called the Earned Value.

**Budgeting** The process of translating resource requirements into a funding profile.

**Builder's Trial (BT)** Evaluation trials and inspection conducted by the builder for the purpose of assuring the builder and the Navy that the ship is, or will be, ready for acceptance trials. This trial should be a comprehensive test of all ship's equipment and approximate the scope of the acceptance trial.

**Built-In Test Equipment (BITE)** Any device permanently mounted in the prime equipment and used for the express purpose of testing the prime equipment, either independently or in association with external test equipment.

**Burden** Costs which cannot be attributed or assigned to a system as direct cost. An alternative term for Overhead.

**Burn Rate** The monthly rate at which a contractor's funds are expended during the period of the contract.

**Business and Financial Management** Business and financial functions, including management of acquisition funds and contracting activities, typically include: the acquisition plan (AP) (checklist), acquisition strategy (road map); contract types, award and monitoring; cost estimating, formulation of input for the program objectives memorandum (POM), the budget, and other programmatic or financial documentation of the planning,

programming, and budgeting system (PPBS); request for proposal (RFP) preparation; source selection; contractor surveillance; and budget execution (paying bills).

**Buy-American Act** Provides that the U.S. government generally give preference to domestic end products. (Title 10 U.S.C. § 41 A-D). This preference is accorded during the price evaluation process by applying punitive evaluation factors to most foreign products. Subsequently modified (relaxed) by Culver-Nunn Amendment (1977) and other 1979 trade agreements for dealing with North Atlantic Treaty Organization (NATO) allies.

**Buy-in** Submission of an offer, usually substantially below estimated costs, with the expectation of winning the contract.

**Buy-out** During production when there are multiple contractors, a final competition for the last lot to be produced — winner-take-all.

**Buy** 1. To approve, concur, or accept an action or proposal from another agency or office. 2. The number of end items to be procured either over a certain period or in total.

# <u>C</u>

**C4ISR Architecture Framework** Replaced the Technical Architecture Framework for Information Management as the strategic architectural guidance for information technology systems in DoD. Its purpose is to provide rules, guidance and product descriptions for developing and presenting architecture descriptions that ensure a common denominator for understanding, comparing and integrating architectures across DoD.

**Capability** A measure of the systems' ability to achieve mission objectives, given the system condition during the mission.

**Capacity Analysis** An analysis most frequently employed in a machine or process area to project capacity for additional business.

Capstone Requirements Document (CRD) A document resulting from a combination of two or more mission need statement (MNS)/operational requirements documents (ORDS)/programs when considered together in a system-of-systems. The CRD concept takes advantage of independent systems which can be integrated together to create a master system which satisfies a higher level requirement. The CRD identifies master system requirements and serves as a guide for ORD development of independent system components and as a vehicle for program oversight.

**Capstone Test and Evaluation Master Plan (TEMP)** A TEMP which addresses the testing and evaluation of a defense system consisting of a collection of individual systems which function collectively to achieve the objectives of the defense system. Individual

system-unique content requirements are addressed in an annex to the basic Capstone TEMP.

**Centralized Management** The concept of using a single, designated management authority. It includes system management, program/project management, and product management.

**Certification** The process within the Office of the Secretary of Defense (OSD) for cooperative research and development (R&D) projects authorized under Title 10 U.S.C. §2350a, whereby candidate projects are screened and those meeting the selection criteria are certified (approved) for implementation pending memorandum of understanding (MOU) negotiation and signature and release of funds. Program elements (PEs) for these funds are controlled at OSD and component headquarters staff level.

**Certification for Initial Operational Test and Evaluation (IOT&E)** A service process undertaken in the engineering and management development (EMD) resulting in the announcement of a system's readiness to undergo IOT&E. The process varies with each Service.

Chairman's Program Assessment (CPA) Summarizes the views of the Chairman, Joint Chiefs of Staff (CJCS) on the balance and capabilities of forces and support levels to attain national security objectives. It is the Chairman's personal assessment of the adequacy of the program objectives memorandum (POM) force to assist the Secretary of Defense (SECDEF) in decisions on the future years defense program (FYDP) subsequent to receipt of the POMs.

Chairman's Program Recommendation (CPR) Documentation sent to the Secretary of Defense (SECDEF) by the Chairman, Joint Chiefs of Staff (CJCS) which reflects his view of the priorities and warfighting requirements of the unified combatant commanders Commanders-in-Chief (CINCs) that should be incorporated into the Defense Planning Guidance (DPG) for DoD components.

**Change Order** (**CO**) A unilateral order, signed by the government contracting officer, directing the contractor to make a change that the *Changes clause* authorizes without the contractor's consent.

Charter (Joint Program Manager's) Formal document prepared by the lead service with approval of the participating services which delineates the program manager's (PM's) responsibility, authority and major functions, and describes relationships with other organizations which will use and/or support the program. The charter also describes and assigns responsibility for satisfying unique management requirements of participating services.

Charter (Program Manager's (PM's)) Provides authority to conduct the program within cost, schedule, and performance constraints approved by the decision authority. Establishes

manpower resources for the program office and includes assignment of personnel to perform the functions of technical management/systems engineering, logistics, business and financial management, as well as the designation of a contracting officer. It also defines the PM's line of authority and reporting channels.

Chief Information Officer (CIO) An executive agency official responsible for providing advice and other assistance to the head of the executive agency to ensure that information technology is acquired and information resources are managed for the executive agency according to statute; developing, maintaining, and facilitating the implementation of a sound and integrated information technology architecture for the executive agency; and promoting the effective and efficient design and operation of all major information resources management processes for the executive agency, including improvements to work processes of the executive agency. The CIO for DoD is the ASD(C3I).

**Chop** Concurrence acquired during coordination.

**Claim** Assertion by one of the contracting parties seeking adjustment or interpretation of an existing contract subject to the dispute clause on the contract.

**Clarification** A government communication with an offeror on a competitively negotiated procurement for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in a proposal.

**Closed Interfaces** Privately controlled system/subsystem boundary descriptions that are not disclosed to the public or are unique to a single supplier.

**Co-Development** Systems or subsystems cooperatively designed and developed in two or more countries. Shared responsibilities include design and engineering, and may be expanded to include applied research.

**Co-Production** Production of a defense system in two or more countries. Involves the transfer of production technology and complex or sensitive subsystem components from the country of origin to countries producing the system. Recipient may expand production to include subsystems and components.

**Co-Production Programs** 1. Co-production programs comprise those programs in which the U.S. government (USG) enables an eligible foreign government, international organization, or designated commercial producer to acquire the technical data and know-how to manufacture or assemble in whole or in part an item of U.S. defense equipment for use in the defense inventory of the foreign government. 2. Co-production programs so defined may be implemented through any one or a combination of international agreements, Letters of Offer and Acceptance (LOAs), and direct commercial agreements subject to USG export licenses.

**Combat Developer** Command or agency that formulates doctrine, concepts, organization, materiel requirements, and objectives. May be used generically to represent the user community role in the materiel acquisition process. (Army and Marine Corps)

**Combat Development** Covers research, development, and testing of new doctrines, organizations, and material for early integration into the structure. (Army and Marine Corps)

Commerce Business Daily (CBD) Publication of the Department of Commerce in which the government publicizes a potential buy (a "synopsis") to notify interested vendors.

Commercial Item A commercial item is any item, other than real property, that is of a type customarily used for nongovernmental purposes and that has been sold, leased, or licensed to the general public; or has been offered for sale, lease, or license to the general public; or any item evolved through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a government solicitation. Also included in this definition are services in support of a commercial item, of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions; this does not include services that are sold based on hourly rates without an established catalog or market price for a specified service performed.

**Commercial Off-The-Shelf (COTS)**. Commercial items that require no unique government modifications or maintenance over the life cycle of the product to meet the needs of the procuring agency.

**Commitment** An administrative reservation of funds by the comptroller in anticipation of their obligation. Based upon firm procurement directives, orders, requisitions, authorizations to issue travel orders, or requests.

**Commodity** A group or range of items which possess similar characteristics, have similar applications, or are susceptible to similar supply management methods.

Common Operating Environment (COE) "Mission application independent" architecture, reusable software and a set of guidelines and standards in three "layers": 1) a kernel (operating system/software tools/print services) 2) infrastructure services (data exchange/network management) and 3) common support applications (e.g. office automation). Current major systems that are COE compliant are the Global Command and Control System (GCCS) and the Global Combat Support System (GCSS). The COE is also called the Defense Information Infrastructure Common Operating Environment or DIICOE.

**Commonality** A quality which applies to materiel or systems possessing like and interchangeable characteristics enabling each to be utilized or operated and maintained by

personnel trained on the others without additional specialized training; and/or having interchangeable repair parts and/or components. Applies to consumable items interchangeable without adjustment.

**Comparability Analysis** An examination of two or more systems and their relationships to discover similarities or differences.

**Compatibility** The capability of two or more items or components of equipment or material to exist or function in the same system or environment without mutual interference. (See Nuclear, Biological and Chemical Compatibility.)

**Competition** An acquisition strategy whereby more than one contractor is sought to bid on a service or function; the winner is selected on the basis of criteria established by the activity for whom the work is to be performed. The law and DoD policy require maximum competition throughout the acquisition life cycle.

**Competitive Proposals** A procedure used in negotiated procurement which concludes with awarding of a contract to the offeror whose offer is most advantageous to the government.

**Competitive Prototyping Strategy (CPS)** Prototype competition between two or more contractors in a comparative side-by-side test.

**Component** 1. Subsystem, assembly, subassembly or other major element of an end item. 2. Military department, or agency of DoD.

Component Acquisition Executive (CAE) See DoD Component Acquisition Executive.

**Component Breakout** See Breakout.

**Component Cost Analysis (CCA)** A cost estimate prepared by an office or other entity of a military department that is outside the chain of command of that military department's authority responsible for developing or acquiring the program.

**Component Program** A major defense acquisition program (MDAP) (acquisition category (ACAT) 1C) or major automated information system acquisition program (MAIS) (ACAT IAC) delegated to the military department or defense agency for management.

**Compounding** The process of increasing the future worth of a present amount. An application of the principle that future worth is greater than present worth when viewed from the future due to the payment of interest.

Comptroller The chief financial officer (CFO) for the activity to which assigned. At the Office of the Secretary of Defense (OSD) level, the Under Secretary of Defense (Comptroller) (USD(C)) is responsible for all budgetary matters.

**Computer Resources** The totality of computer hardware, firmware, software, personnel, documentation, supplies, services, and support services applied to a given effort.

Computer Resources Life Cycle Management Plan (CRLCMP) A program management document that describes the development, acquisition, test, and support plans over the life cycle of computer resources integral to, or used in, direct support of systems.

**Computer Resources Support** Includes the facilities, hardware, software, documentation, manpower, and personnel needed to operate and support computer systems. One of the traditional elements of logistics support.

**Computer Software** (or Software) A combination of associated computer instructions and computer data definitions required to enable the computer hardware to perform computational or control functions.

Computer Software Configuration Item (CSCI) Analogous to a hardware configuration item, that is, a CSCI is software program (typically) which performs a common end-use function, follows its own development cycle, and is individually managed. It is also called a Software Item (SI).

**Computer Software Unit (CSU)** A subdivision of a CSCI for the purposes of engineering management. CSU's are typically subroutines or subprograms.

**Computer Software Documentation** Technical data information, including computer listings and printouts, which documents the requirements, design, or details of computer software, explains the capabilities and limitations of the software, or provides operation instructions for using or supporting computer software during the software's operational life.

**Concept Exploration (CE)** Beginning after Milestone 0 approval, the initial phase of the system acquisition process. During this phase, the acquisition strategy is developed, system alternatives are proposed and examined, and the systems program requirements document is expanded to support subsequent phases.

**Conclusion** The act of signing, initialing, responding, or otherwise indicating the acceptance of an international agreement by the United States.

**Concurrency** Part of an acquisition strategy which would combine or overlap life cycle phases (such as engineering and manufacturing development (EMD), and production), or activities (such as development and operational testing).

**Concurrent Budget Resolution** (**CBR**) Resolution passed by both Houses of Congress, but not requiring the signature of the President, setting forth or revising the congressional budget for the United States Government. Scheduled to be adopted by the Congress on or before April 15 of each year (Title 2 U.S.C. §632).

**Concurrent Engineering** A systematic approach to the integrated, concurrent design of products and their related processes, including manufacture and support. Intended to cause developers, from the beginning, to consider all elements of the system life cycle from requirements development through disposal, including cost, schedule, and performance.

Conference of NATO Armaments Directors (CNAD) The CNAD and its subordinate bodies, including the main groups, cadre groups, ad hoc groups, and project steering committees, and any other bodies that may be established by the CNAD.

**Configuration** A collection of an item's descriptive and governing characteristics, which can be expressed in functional terms, i.e., what performance the item is expected to achieve; and in physical terms, i.e., what the item should look like and consist of when it is built.

**Configuration Identification** The process of establishing and describing the contractual baselines; e.g., identification of configuration items (CIs).

**Configuration Item (CI)** An aggregation of hardware, firmware, computer software, or any of their discrete portions, which satisfies an end use function and is designated by the government for separate configuration management. Configuration items may vary widely in complexity, size, and type, from an aircraft, electronic, or ship system to a test meter or round of ammunition. Any item required for logistic support and designated for separate procurement is a CI.

Configuration Management (CM) The technical and administrative direction and surveillance actions taken to identify and document the functional and physical characteristics of a configuration item (CI), to control changes to a CI and its characteristics, and to record and report change processing and implementation status. It provides a complete audit trail of decisions and design modifications.

Constant Dollars A method of relating dollars in several years by removing the effects of inflation and showing all dollars at the value they would have in a selected base year (BY). Constant dollar series are derived by dividing current dollar estimates by appropriate price indices, a process generally known as deflating. The result is a time series as it would presumably exist if prices were the same throughout as in the BY - in other words, as if the dollar had constant purchasing power. Any changes in such a series would reflect only changes in the real (physical) volume of output. Constant dollar figures are commonly used for gross domestic product (GDP) and its components.

**Constant Year Dollars** See Constant Dollars.

**Constructive Change** A contract change without formal written authority.

**Consumable** Administrative or housekeeping items, general purpose hardware, common tolls, or any item not specifically identified as controlled equipage or spare parts.

Consumer Price Index (CPI) A measure of change over time in the buying power of the dollar, derived by comparing the price of like items during different time periods. Published by the Bureau of Labor Statistics.

**Contingency Testing** Additional testing required to support a decision to commit added resources to a program, when significant test objectives have not been met during planned tests.

Continuing Resolution Authority (CRA) Legislation enacted by Congress to provide budget authority for specific ongoing activities in cases where the regular fiscal year (FY) appropriation has not been enacted by the beginning of the FY. A CRA usually specifies a designated period and maximum rate at which the agency may incur obligations, based on the rate of the prior year, the President's budget request, or an appropriation bill passed by either or both Houses of the Congress. Normally, new programs cannot be started under a CRA.

Continuous Acquisition and Life-Cycle Support (CALS) A core strategy to share integrated digital product data through a set of standards to achieve efficiencies in business and operational mission areas.

**Contract** An agreement between two or more legally competent parties, in the proper form, on a legal subject matter or purpose and for legal consideration.

**Contract Action** An action resulting in a contract or a modification to a contract.

**Contract Adjustment Board** A department board (for example, Army Contract Adjustment Board) at the Secretarial level which deals with disputes and requests for extraordinary relief under Public Law 85-804.

**Contract Administration** All the activities associated with the performance of a contract from award to close-out.

**Contract Administration Office (CAO)** The activity identified in the DoD Directory of Contract Administration Services Components assigned to perform contract administration responsibilities.

Contract Administration Services (CAS) All those actions accomplished in or near a contractor's plant for the benefit of the Government, which are necessary to the performance of a contract or in support of the buying offices, system/project managers, and other organizations, including quality assurance, engineering support, production surveillance, preaward surveys, mobilization planning, contract administration, property administration, industrial security, and safety.

**Contract Authority** A type of budget authority that permits a federal agency to incur obligations before appropriations have been passed or in excess of the amount of money in

a revolving fund. Contract authority must be funded subsequently by an appropriation so that the commitments entered into can be paid.

**Contract Award** Occurs when the contracting officer has signed and distributed the contract to the contractor.

**Contract Budget Base** The negotiated contract cost plus the estimated cost of authorized unpriced work.

Contract Categories Two categories, sometimes called families, cost-reimbursement (where government pays the cost, subject to limitations); and fixed-price (where government pays a price, subject to a maximum ceiling amount if a sharing incentive is used.)

**Contract Cost Overrun/Underrun** A net change in the contractual amount over/under that contemplated by a contract target price, estimated cost plus fee (any type cost reimbursement contract), or redeterminable price, due to the contractor's actual contract costs being over/under target or anticipated contracts costs but not attributable to any other cause of cost growth previously defined.

**Contract Data Requirements List (CDRL)** A DD Form 1423 list of contract data requirements that are authorized for a specific acquisition and made a part of the contract.

**Contract Definition** A funded effort, normally by two or more competing contractors, to establish specifications, to select technical approaches, to identify high-risk areas, and to make cost and production time estimates for developing large weapons systems.

**Contract Requirements** In addition to specified performance requirements, contract requirements include those defined in the statement of work (SOW); specifications, standards, and related documents; the contract data requirements list (CDRL); management systems; and contract terms and conditions.

Contract Work Breakdown Structure (CWBS) A complete WBS for a contract. It includes the DoD-approved Program WBS extended to the agreed contract reporting level and any discretionary extensions to lower levels for reporting or other purposes. It includes all the elements for the products (hardware, software, data, or services) which are the responsibility of the contractor. This comprehensive WBS forms the framework for the contractor's management control system.

**Contract, Cost-Plus-Fixed Fee (CPFF)** A cost reimbursement type contract which provides for the payment of a fixed fee to the contractor. The fixed fee once negotiated, does not vary with actual cost, but may be adjusted as result of any subsequent changes in the scope of work or services to be performed under the contract.

**Contract, Cost-Plus-Incentive-Fee (CPIF)** A cost reimbursement type contract with provision for a fee which is adjusted by formula in accordance with the relationship which

total allowable costs bear to target costs. The provision for increase or decrease in the fee, depending upon allowable costs of contract performance, is designed as an incentive to the contractor to increase the efficiency of performance.

**Contract, Cost-Plus-Percentage-Of-Cost** A form of contract formerly used but now illegal for use by DoD which provided for a fee or profit as a specified percentage of the contractor's actual cost of accomplishing the work to be performed. Sometimes referred to as a "cost-plus" or "percentage-of-cost" contract.

Contract, Cost-Reimbursement Type A type of contract which provides for payment to the contractor of allowable costs incurred in the performance of the contract, to the extent prescribed in the contract. This type of contract establishes an estimate of total cost for the purpose of obligation of funds and establishing a ceiling which the contract may not exceed (except at his own risk) without prior approval or subsequent ratification of the contracting officers. (See Contract, Cost-Plus-Fixed-Fee (CPFF) and Contract, Cost-Plus-Incentive-Fee (CPIF).)

**Contract, Firm Fixed Price (FFP)** Provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This type of contract places upon the contractor maximum risk and full responsibility for all costs and resulting profit or loss. Provides maximum incentive for the contractor to control costs, and imposes a minimum administrative burden on the government.

Contract, Fixed Price Incentive Firm (FPIF) Uses an incentive whereby the contractor's profit is increased or decreased by a pre-determined share of an overrun or underrun. A firm target is established from which to later compute the overrun or underrun. A ceiling price is set as the maximum amount the government will pay. Necessary elements for this type of contract are: target cost - best estimate of expected cost; target profit - fair profit at target cost; share ratio(s) - to adjust profit after actual costs are documented; and, ceiling price - limit the government will pay.

**Contract, Fixed Price Type** A type of contract which provides for a firm price to the government, or in appropriate cases, an adjustable price. (See Contract, Firm Fixed Price (FFP) and Contract, Fixed Price Incentive Firm (FPIF).)

Contract, Fixed Price With Economic Price Adjustment (FPEPA) A type of contract providing for upward or downward revision of the stated contract price upon the occurrence of a specified contingency. Adjustments may reflect increases/decreases in actual costs of labor or material, or in specific indices of labor or material costs.

Contracting Activity Certain commands designated by the services as contracting activities. Also, the subordinate command in which the principal contracting office is located. It may include the program office, related functional support offices, and contracting offices. The DoD Federal Acquisition Regulation Supplement (DFARS) lists the contracting activities. Examples are Naval Air Systems Command (NAVAIR) and Air Force

Materiel Command (AFMC). Contracting activity is synonymous with Procuring Activity. The Head of Contracting Activity (HCA) has certain approval and authority responsibilities.

**Contracting Officer (CO)** A person with authority to enter into, administer, and/or terminate contracts and make related determinations and findings.

**Contractor-Owned, Contractor-Operated (COCO)** A manufacturing facility owned and operated by a private contractor performing a service, under contract, for the government.

**Contractor** An entity in private industry which enters into contracts with the government to provide goods or services. In this *GLOSSARY*, the word also applies to government operated activities which perform work on acquisition defense programs.

**Contractor Acquired Property** Property procured or otherwise provided by the contractor for the performance of a contract, title to which is vested in the government.

Contractor Furnished Equipment (CFE) Standard items of hardware, electrical equipment, and other standard production or commercial items furnished by a prime contractor as part of a larger assembly.

Contractor Logistics Support (CLS) The performance of maintenance and/or material management functions for a DoD system by a commercial activity. Historically done on an interim basis until systems support could be transitioned to a DoD organic capability. Current policy now allows for the provision of system support by contractors on a long-term basis. Also called Long-Term Contractor Logistics Support.

**Contractor Performance Reporting** Method requiring periodic accounting and reporting by the contractor on performance under contract to date.

**Contractor Support** See Interim Contractor Support.

**Contractual Data Requirement** A requirement, identified in a solicitation and imposed in a contract or order, that addresses any aspect of data (i.e., that portion of contractual tasking requirement associated with the development, generation, preparation, modification, maintenance, storage, retrieval, and/or delivery of data).

Cooperative Logistic Supply Support The logistic support provided a foreign government or agency through participating in the U.S. DoD logistics system under Security Assistance procedures with reimbursement to the U.S. for support provided.

**Cooperative Logistics** This term is used to refer to any international cooperation between the United States and one or more allied or friendly nations or international organizations in the logistical support of weapons or other defense systems and equipment used in the armed forces of the cooperating partners.

**Cooperative Opportunities** In accordance with Title 10 U.S.C. §2350a, the acquisition strategies for major defense acquisition programs must ensure that opportunities to conduct international, cooperative projects are considered at an early point during the formal review process of the DoD.

Cooperative Programs (1) 1. Cooperative programs comprise of one or more specific cooperative projects that are conducted under an international agreement and that are implemented under: Title 22 U.S.C. (Arms Export Control Act), to include the specific provisions of, Title 22 U.S.C. §2767, regarding cooperative projects with friendly foreign countries, or Title 10 U.S.C. (Armed Forces), to include the specific provisions of, Title 10 U.S.C. §2350a, regarding cooperative research and development (R&D) programs with allied countries.

- 2. Cooperative programs so defined <u>exclude</u> programs that entail acquisition for solely foreign military requirements, as distinct from joint U.S./foreign military requirements. Acquisition for solely foreign military requirements will be satisfied through either Foreign Military Sales (FMS) or direct commercial transactions with U.S. contractors. Government-to-government agreements relating to acquisition for foreign military requirements may include procurement from U.S. production, foreign coproduction, or licensed production of a wholly U.S.-developed weapon system.
  - 3. See Cooperative Project and Foreign Comparative Testing Program.

Cooperative Programs (2) Programs that comprise one or more specific cooperative projects whose arrangements are defined in a written agreement between the parties and which are conducted in the following general areas:

- 1. Research, development, testing, and evaluation (RDT&E) of defense articles (including cooperative upgrade or other modification of a U.S.-developed system), joint production (including follow-on support) of a defense article that was developed by one or more of the participants, and procurement by the United States of a foreign defense article (including software), technology (including manufacturing rights), or service (including logistics support) that are implemented under Title 22 U.S.C. §2767, reference (c), to promote the rationalization, standardization, and interoperability (RSI) of NATO armed forces or to enhance the ongoing efforts of non-NATO countries to improve their conventional defense capabilities.
- 2. Cooperative research and development program (R&D) with NATO and major non-NATO allies implemented under Title 10 U.S.C. §2350a, to improve the conventional defense capabilities of NATO and enhance rationalization, standardization, and interoperability (RSI).
- 3. Data, information, and personnel exchange activities conducted under approved DoD programs.

4. Testing and evaluation (T&E) of conventional defense equipment, munitions, and technologies developed by allied and friendly nations to meet valid existing U.S. military requirements.

**Cooperative Project** 1. A cooperative project is a jointly planned undertaking, with a finite beginning and finite ending, of something to be accomplished, produced, or constructed by the participants on the basis of:

- a. A bilateral or multilateral written agreement between the participants; or b. An equitable contribution by the participants to the full costs of the
- b. An equitable contribution by the participants to the full costs of the undertaking.
- 2. A project involving joint participation by the U.S. and one or more allied or friendly nations under a memorandum of understanding (MOU) (or other formal agreement) to carry out a cooperative research, development, test, and evaluation (RDT&E), production, or procurement project (including follow-on support).
  - 3. See Cooperative Program.

Cooperative Project Memorandum of Understanding (MOU) A government-to-government (or international organization) international agreement setting forth the terms and conditions under which the signatories agree to cooperate in the performance of a specific research, development, test, and evaluation (RDT&E), exchange, standardization, or production effort (including follow-on and logistical support).

**CORE Depot Maintenance** The capability maintained within organic Defense depots to meet the readiness and sustainability requirements of weapon systems that support the Joint Chiefs of Staff contingency scenario(s). CORE exists to minimize operational risks and to guarantee readiness for these weapon systems.

**Cost/ Pricing Data** Used by the contractor to respond to a government request for proposal (RFP). The Truth-in-Negotiations Act requires the bidding contractors certify that the data are complete, current, and accurate as of the date the contractor and the government agree on a price.

**Cost-Based Budget** A budget based on the cost of goods and services to be received during a given period whether paid for or not before the end of the period. Not to be confused with an expenditure-based budget, which is based on the cost paid for goods and services received.

**Cost-Benefit Analysis** An analytic technique that compares the costs and benefits of investments, programs, or policy actions in order to determine which alternative or alternatives maximize net profits. Net benefits of an alternative are determined by subtracting the present value of costs from the present value of benefits.

**Cost Analysis** An analysis and evaluation of each element of cost in a contractor's proposal to determine reasonableness.

Cost Analysis Improvement Group (CAIG) Organization within the office of the Director, Program Analysis and Evaluation (PA&E) which advises the Defense Acquisition Board (DAB) on matters concerning the estimation, review, and presentation of cost analysis of future weapon systems. The CAIG also develops common cost estimating procedures for DoD.

**Cost Analysis Requirements Description (CARD)** A description of the salient features of the acquisition program and of the system itself. It is the common description of the technical and programmatic features of the program that is used by the teams preparing the program office, component cost analysis, and independent life cycle cost estimates.

**Cost and Operational Effectiveness Analysis (COEA)** Obsolete - see Analysis of Alternatives (AoA).

Cost as An Independent Variable (CAIV) Methodologies used to acquire and operate affordable DoD systems by setting aggressive, achievable life cycle cost objectives, and managing achievement of these objectives by trading off performance and schedule, as necessary. Cost objectives balance mission needs with projected out-year resources, taking into account anticipated process improvements in both DoD and industry. CAIV has brought attention to the government's responsibilities for setting/adjusting life-cycle cost objectives and for evaluating requirements in terms of overall cost consequences.

Cost Avoidance An action taken in the immediate time frame that will decrease costs in the future. For example, an engineering improvement that increases the mean time between failures and thereby decreases operating support costs can be described as a cost avoidance action. It is possible for the engineering change to incur higher costs in the immediate time frame, however, if the net total life cycle costs are less, it is a cost avoidance action. The amount of the cost avoidance is determined as the difference between two estimated cost patterns, one before the change and the one after.

**Cost Breakdown Structure** A system for subdividing a program into hardware elements and sub-elements; (b) functions and subfunctions; and cost categories to provide for more effective management and control of the program.

**Cost Cap** The maximum total dollar amount the DoD is willing to commit for acquiring a given capability. A cost cap consists of program acquisition costs only and is maintained in constant dollars. Cost caps are applied to selected baseline programs.

**Cost Center** A field activity subdivision or a responsibility center, for which costs identification is desired and which is amenable to cost control through one responsible supervisor.

**Cost Effectiveness** A measure of the operational capability added by a system as a function of its life cycle cost.

**Cost Estimate** A judgment or opinion regarding the cost of an object, commodity, or service. A result or product of an estimating procedure which specifies the expected dollar cost required to perform a stipulated task or to acquire an item. A cost estimate may constitute a single value or a range of values.

**Cost Estimating Methodologies** 1. Comparison/analogy. 2. Parametric/top-down. 3. Detailed engineering/bottoms-up. 4. Extrapolation from actuals.

**Cost Estimating Relationship (CER)** A mathematical relationship that defines cost as a function of one or more parameters such as performance, operating characteristics, physical characteristics, etc.

**Cost Growth** A term related to the net change of an estimated or actual amount over a base figure previously established. The base must be relatable to a program, project, or contract and be clearly identified including source, approval authority, specific items included, specific assumptions made, date, and the amount.

**Cost Incurred** A cost identified through the use of the accrual method of accounting.

**Cost Model** A compilation of cost estimating logic that aggregates cost estimating details into a total cost estimate.

**Cost Objective** A function, organizational subdivision, contract, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects, and so forth.

**Cost Overrun** The amount by which a contractor exceeds the estimated cost and/or the final limitation (ceiling) of the contract.

**Cost Performance** A monthly report procured by the program manager (PM) from the contractor to obtain report data from the contractor's management system. A standard format used in the PM's decision-making process.

**Cost Performance Integrated Product Team (CPIPT)** An integrated product team (IPT) established to perform cost performance trade-offs.

**Cost Reimbursement Contracts** In general, a category of contracts whose use is based on payment by the government to a contractor of allowable costs as prescribed by the contract. Normally only "best efforts" of the contractor are involved, such as cost, cost sharing, cost-plus-fixed fee (CPFF), cost-plus-incentive fee (CPIF), and cost-plus award fee (CPAF) contracts.

**Cost Risk** The risk that a program will not meet its acquisition strategy cost objectives that were developed using cost as an independent variable (CAIV) or cost objectives established by the acquisition authority.

**Cost Savings** An action that will result in a smaller than projected level of costs to achieve a specific objective. Incentive contracts where the contractor and government share in any difference in cost below the estimated target cost incurred by the contractor to achieve the objective of the contract is a cost savings. It differs from a cost avoidance in that a cost target has been set from which the amount of savings can be measured. In a cost avoidance, the amount is determined as the difference between two estimated cost patterns.

**Cost Variance** (CV) An output of the Earned Value Management System which measures cost overrun or cost underrun relative to the program performance measurement baseline. It is equal to the difference between BCWP and ACWP, that is, CV = BCWP - ACWP.

Cost/Schedule Control Systems Criteria (C/SCSC) Obsolete. See Earned Value Management System (EVMS).

**Could Cost** A technique designed to achieve the best quality and price for goods purchased, based on what a program "could cost" if both the government and contractor eliminate all nonvalue-added work done or required by either party.

**Cradle-To-Grave** Total life cycle of a given system, from concept through development, acquisition, operations phases, and final disposition. Also called womb-to-tomb.

**Crew Load** Number of workers assigned to complete work on a defined production component.

**Critical Acquisition Processes** The following is included in industrial and program critical acquisition processes; design, test, production, facilities, logistics, and management.

Critical Design Review (CDR) A review that may be conducted to determine that the detailed design satisfies the performance and engineering requirements of the development specification; to establish the detailed design compatibility among the item and other items of equipment, facilities, computer programs, and personnel; to assess producibility and risk areas; and to review the preliminary product baseline specifications. Normally conducted during Phase II, Engineering and Manufacturing Development (EMD).

**Critical Intelligence Parameter (CIP)** A threat capability or threshold established by the program manager (PM), changes to which could critically impact on the effectiveness and survivability of the proposed system.

**Critical Issues** Those aspects of a system's capability, either operational, technical, or other, that must be questioned before a system's overall suitability can be known. Critical issues are of primary importance to the decision authority in reaching a decision to allow the system to advance into the next phase of development.

**Critical Material** Material that has been classified as being essential to the U.S. economy. There are approximately 40 items in this category. The U.S. is more than 50 percent dependent on foreign sources for over half of these.

Critical Operational Issue (COI) A key operational effectiveness and/or operational suitability issue (not a parameter, objective, or threshold) that must be examined in operational test and evaluation (OT&E) to determine the system's capability to perform its mission. A COI is normally phrased as a question that must be answered in order to properly evaluate operational effectiveness (e.g., "Will the system detect the threat in a combat environment at adequate range to allow successful engagement?") or operational suitability (e.g., "Will the system be safe to operate in a combat environment?").

**Critical Path Method (CPM)** A technique that aids understanding of the dependency of events in a project and the time required to complete them. Activities which, when delayed, have an impact on the total project schedule are critical and said to be on the critical path.

**Critical Technology** Technologies that consist of (a) arrays of design and manufacturing know-how (including technical data); (b) keystone manufacturing, inspection, and test equipment; (c) keystone materials; and (d) goods accompanied by sophisticated operation, application, or maintenance know-how that would make a significant contribution to the military potential of any country or combination of countries and that may prove detrimental to the security of the United States. (Also referred to as militarily critical technology.)

**Critical Weakness Reliability Test** Determines the mode of failure when equipment is exposed to environments in excess of the anticipated environments. By this testing, critical levels can be determined for parameters such as vibration, temperature, and voltage which will adversely affect the component.

**Cross-Servicing** That function performed by one military service in support of another military service for which reimbursement is required from the service receiving support.

**Cumulative Average Curve** A plot of the average cost of *N* units at any quantity *N* or the total cost divided by the total quantity.

**Current-Year Dollars, Then-Year Dollars** Dollars that include the effects of inflation or escalation and or reflect the price levels expected to prevail during the year at issue. (See Escalated Dollars.)

**Current Estimate** Component and/or PM's most recent estimate of the program's parameters, and usually reflects the current President's Budget (PB) as adjusted by fact-

of-life changes (i.e., fact of life meaning already happened or unavoidable). For ACAT I and IA programs, current estimates of the APB parameters shall be reported quarterly in the Defense Acquisition Executive Summary (ACAT I), or the Major Automated Information System (MAIS) Quarterly Report (ACAT IA).

**Current Level** The amounts provided or required by law as a result of permanent appropriations, advance appropriations, existing entitlement authority, and previous year outlays from discretionary appropriations. Credit authority provided by any of these laws is also considered to be part of the current level, as are direct loans that result from defaults on guaranteed loans.

**Current Services** An estimate, provided each year by the Office of Management and Budget (OMB), of the budget authority and outlays that would be needed in the next fiscal year (FY) to continue federal programs at their current levels. These estimates reflect the anticipated costs of continuing these programs at their present spending levels without any policy changes, that is, ignoring all new presidential and congressional initiatives that have not yet been enacted into law.

**Current Year (CY)** The fiscal year in progress. Also called the execution year. (See Budget Year (BY).)

**Cycle** 1. The time required to complete a predetermined number of article(s) of production. 2. Also refers to the resource allocation process (RAP) occurring on a calendar basis.

D

**DAB** See Defense Acquisition Board.

**DAB Program** Requires a Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) decision at each milestone review point (acquisition category (ACAT) ID program).

DAB Readiness Meeting (DRM) Approximately one week prior to the Defense Acquisition Board (DAB) review, a DRM is held to pre-brief the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)), Vice Chairman of the Joint Chiefs of Staff (VCJCS), and the other DAB participants (including cognizant Program Executive Officers (PEOs) and Program Managers (PMs). The purpose of the meeting is to update the USD(A&T) on the latest status of the program and to inform the senior acquisition officials of any outstanding issues. Normally, the Overarching Integrated Product Team (OIPT) leader briefs the DRM. If outstanding issues are resolved at the DRM, the USD(A&T) may decide that a formal DAB meeting is not required and issue an Acquisition Decision Memorandum (ADM) following the DRM. ADMs shall be coordinated with the DAB Principals.

**Data** All recorded information, regardless of form or characteristic, delivered under contract. Technical data exclude management and financial data. (See Limited Rights and Unlimited Rights.)

**Data Call** In response to a program managers (PMs) data call, contract data requirements list (CDRL) candidate items are developed by persons with data needs. Most are developed to fit under standard data item descriptions (DIDs).

**Debit** 1. Any bookkeeping entry in recording a transaction, the effect of which is to decrease a liability, revenue, or capital account or increase an asset or expense account. 2. Having a balance that represents an asset. 3. The act of making such an entry. 4. A debit memo or debit invoice used in dealings with customers or suppliers.

**Debug** To test or check out a program of instructions and data for a computer in order to eliminate mistakes.

**Decrement** Directed funding level reduction for acquisition program(s).

**De facto standards** Standards set and accepted by the marketplace but lacking approval by recognized standards organizations.

**Defective Pricing** Result of cost/pricing data (C/PD) which was certified by a contractor to be accurate, current, and complete, but was not.

**Defense Acquisition Board (DAB)** The DAB is the Department's senior-level forum for advising the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) on critical decisions concerning acquisition category (ACAT) ID programs. The DAB is composed of the Department's senior acquisition officials. The Board is chaired by the USD(A&T). The Vice Chairman of the Joint Chiefs of Staff (VCJCS) serves as the vice chairman of the Board. Other principal members of the Board include the Principal Deputy USD(A&T); the Under Secretary of Defense (Comptroller) (USD(C)); the Assistant Secretary of Defense (Strategy and Requirements); the Assistant Secretary of Defense for Command, Control, Communications and Intelligence (ASD(C3I))/DoD Chief Information Officer; the Director of Operational Test and Evaluation (DOT&E); the Director of Program Analysis and Evaluation (PA&E); the Director of Defense Research and Engineering; the Acquisition Executives of the Army, Navy, and the Air Force; the cognizant Overarching Integrated Product Team (OIPT) leader; the cognizant Program Executive Officer(s) (PEOs) and Program Manager (PMs); and the DAB Executive Secretary.

The DAB Chairman is also routinely supported by senior advisors, such as but not limited to the Deputy Under Secretary of Defense (Industrial Affairs and Installations); the Assistant Secretary of Defense (Economic Security); the Deputy Under Secretary of Defense (Acquisition Reform); the Deputy Under Secretary of Defense (Environmental Security); the Deputy Under Secretary of Defense (Logistics); the Director of Acquisition

Program Integration (API); the Director of the Defense Intelligence Agency (DIA); the Director of Defense Procurement (DP); the Director of Test, Systems Engineering and Evaluation (DTSE&E); the Chairman of the Cost Analysis Improvement Group (CAIG); and the Deputy General Counsel (Acquisition and Logistics). Other senior Department officials may be invited by the USD(A&T) to participate in DAB meetings on an asneeded basis.

**Defense Acquisition Deskbook** An automated reference tool sponsored by the Office of the Under Secretary of Defense (Acquisition and Technology) (OUSD(A&T)) to assist program offices in implementing DoDD 5000.1 and DoD 5000.2-R. It consists of a World Wide Web (WWW) home page with a bulletin board, an information structure of discretionary information, and a reference library of statutory and regulatory guidance. The information structure and reference library may be accessed through commercially available web browsers , and are available by CD subscription from the home page location.

**Defense Acquisition Executive (DAE)** The individual responsible for all acquisition matters within the DoD. (See DoDD 5000.1.)

**Defense Acquisition Executive Summary (DAES)** DAES is the principal mechanism for tracking programs between milestone reviews. A DAES report is provided by the program manager (PM) of a major defense acquisition program (MDAP) to the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) each calendar quarter.

**Defense Acquisition Regulatory Council (DARC)** The DARC is one of two councils authorized to generate changes to the Federal Acquisition Regulation (FAR). DARC members are from the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)), the DoD Components, and NASA. (The other council is the Civilian Agency Acquisition Council with representatives from the other executive departments.)

**Defense Articles** Weapons, weapon systems, munitions, aircraft, boats, or other implements of war; property, installations, material, equipment, or goods used for purposes of furnishing military assistance or making military sales; any machinery, facility, tool, material, supply, or other items necessary for the manufacture, production, processing, repair, servicing, storage, construction, transportation, operation, or use of any other defense article or any component or part of any articles listed above. Defense articles do not include merchant vessels, major combatant vessels, or as defined by the Atomic Energy Act of 1954, as amended (Title 42 U.S.C. §2011), source material, by-product material, special nuclear material, production facilities, utilization facilities, or atomic weapons or articles involving Restricted Data.

**Defense Contract Management Command (DCMC)** The contract administration function is performed by DCMC, which is part of the Defense Logistics Agency (DLA).

**Defense Contract Management Command (DCMC) (City/Area)** A DCMC contract administration office located in a city or area having cognizance over all government contractors in that city or area, unless they are covered by a team located within a specified contractor's plant. (Formerly called a DCMC Area Office (DCMAO).)

**Defense Contract Management Command (DCMC) (Company Name)** A DCMC contract administration team located at a contractor's plant full time. Formerly called Defense Plant Representative Office (DPRO).

**Defense Contract Management Command Area Office** Obsolete term. See Defense Contract Management Command (City/Area).

**Defense Cooperation** Defense cooperation is a generic term for the range of activity undertaken by the U.S. DoD with its allies and other friendly nations to promote international security. Such activity includes, but need not be confined to, security assistance, industrial cooperation, armaments cooperation, Foreign Military Sales (FMS), training, logistics cooperation, cooperative Research and Development (R&D), Foreign Comparative Testing (FCT), and Host Nation Support.

**Defense Cooperation Country** A "qualifying country" that has a defense cooperation agreement with the United States and for which a determination and findings (D&F) has been made by the Secretary of Defense (SECDEF) waiving the Buy American Act restrictions for a list of mutually agreed-upon items (see DoD Federal Acquisition Regulation Supplement (DFARS) Subpart 225.75).

**Defense Industrial Cooperation** Activities undertaken pursuant to a government-to-government agreement to foster cooperation in research and development (R&D), production and procurement, and logistics support of defense equipment that emphasize joint production of systems to satisfy the military requirements of one or more allied or friendly nations in coordination with the United States.

**Defense Information** Any document, writing, sketch, photograph, plan, model, specification, design prototype, or other recorded or oral information relating to any defense article, defense service, or major combatant vessel, but shall not include Restricted Data as defined by the Atomic Energy Act of 1954, as amended, and data removed from the Restricted Data category under section 142 of that Act.

**Defense Information Infrastructure (DII)** Encompasses the assets and elements (communications networks, computers, software, databases and people) available to meet DoD's information needs.

**Defense Information Infrastructure Common Operating Environment (DIICOE)** See Common Operating Environment.

**Defense Planning Guidance (DPG)** Document issued annually by the Secretary of Defense (SECDEF) to DoD components providing strategic framework for developing the Service program objective memorandum's (POM's). Result of planning efforts by the Joint Staff, Office of the Secretary of Defense (OSD), and the services.

**Defense Plant Representative Office (DPRO)** Obsolete term. See Defense Contract Management Command (DCMC) - (Company Name).

**Defense Resources Board (DRB)** A board, chaired by the Deputy Secretary of Defense, established to facilitate decision making during all phases of the planning, programming, and budgeting system (PPBS) process. Board members include the Chairman of the Joint Chiefs of Staff (CJCS), the Under Secretaries of Defense, the Vice Chairman of the Joint Chiefs and the Secretaries of the Military Departments. The Director, Program Analysis and Evaluation (D,PA&E) is the Executive Secretary of the DRB.

**Defense Systems Affordability Council (DSAC)** Initially called the Defense Manufacturing Council (DMC), this group was instituted by the Deputy Secretary of Defense in 1994 to provide a forum for the senior acquisition leadership of the Department to meet, review issues and opportunities and exchange information on initiatives, successes and lessons learned from mistakes. Its original focus was to accelerate the implementation of acquisition reform in defense systems. In 1997, the DMC was renamed the DSAC and changes were made to its charter to allow it to focus on additional current issues, i.e., achieving better integration and balance between modernization and support and shortening acquisition life cycle costs and improving abilities to accommodate changes in budgets, missions, and technology

**Defense Systems Management College (DSMC)** A DoD college dedicated to educating DoD military and civilian personnel and industry in the DoD systems acquisition process, and conducting research and consulting to support and improve DoD acquisition program management.

**Deferral of Budget Authority** Temporary withholding or delaying the obligation or expenditure of budget authority or any type of executive action which effectively precludes the obligation or expenditure of budget authority. Budget authority may be deferred to provide for contingencies, to achieve savings or greater efficiency in the operations of government, or as otherwise specified by law. Budget authority may not be deferred in order to effect a policy in lieu of one established by law or for any other reason. Deferrals must be communicated to the Congress by the President in a special message.

**Deficiency** Operational need minus existing and planned capability. The degree of inability to successfully accomplish one or more mission tasks or functions required to achieve mission or mission area objectives. Deficiencies might arise from changing mission objectives, opposing threat systems, changes in the environment, obsolescence, or depreciation in current military assets. Also in contract management—any part of a proposal that fails to satisfy the government's requirements.

**Degradation** Lowering of quality, performance, or status.

**Delay Allowance** A time increment included in a time standard to allow for predictable contingencies and minor delays beyond the control of the worker.

Delta Change or difference, e.g., a funding delta.

**Demonstration and Validation (DEM/VAL)** A budget activity in the Research, Development, Test, and Evaluation (RDT&E) appropriation. Normally funds the Program Definition and Risk Reduction (PDRR) phase.

**Department of Defense Acquisition System** A single uniform system whereby all equipment, facilities, and services are planned, designed, developed, acquired, maintained, and disposed of within the DoD. The system encompasses establishing and enforcing policies and practices that govern acquisitions, to include documenting mission needs and establishing performance goals and baselines; determining and prioritizing resource requirements for acquisition programs; planning and executing acquisition programs; directing and controlling the acquisition review process; developing and assessing logistics implications; contracting; monitoring the execution status of approved programs; and reporting to the Congress.

**Department of Defense Strategic Plan** A plan required by the Government Performance and Results Act (GPRA) of 1993. The plan is submitted to the Director of the Office of Management and Budget and Congress and must contain, among other things, a comprehensive mission statement, general goals and objectives, an identification of key external factors beyond the Department's control, descriptions of how goals are to be achieved, how performance goals are related to general goals and objectives, and the program evaluations used to establish or revise general goals and objectives. The Secretary of Defense has determined that the 1997 Quadrennial Defense Review is the DoD Strategic Plan required by GPRA.

**Deploy/Deployment** Fielding a weapon system by placing it into operational use with units in the field/fleet.

**Deployment Plan** A plan to provide for the smooth introduction of a system or equipment to the user.

**Depot Level Maintenance (D Level)** Maintenance performed on material requiring major overhaul or a complete rebuild of parts, assemblies, subassemblies, and end items, including the manufacture of parts, modification, testing, and reclamation as required. Supports organizational and intermediate maintenance activities by more extensive shop facilities and personnel of higher technical skill than are normally available at the lower levels of maintenance.

**Design Control Activity** A contractor or government activity having responsibility for design of a given part and for the preparation and currency of engineering drawings and other technical data for that part.

**Design Interface** One of the traditional elements of logistics support and one of the functions of logistics. Involves the relationship of logistics-related design parameters, such as reliability and maintainability, to readiness and support resource requirements. These logistics-related design parameters are expressed in operational terms rather than inherent values and specifically related to system readiness objectives and support costs of the materiel system.

**Design Parameters** Qualitative, quantitative, physical, and functional value characteristics that are inputs to the design process, for use in design trade-offs, risk analyses, and development of a system that is responsive to system requirements.

**Design Synthesis** The process of translating functional and performance requirements into design solutions to include internal and external interfaces.

**Design-to-Cost (DTC)** Management concept which historically emphasized cost effective design (minimizing cost while achieving performance) and targeting an average unit procurement cost. DTC concentrated on the contractors' activities associated with tracking/controlling costs and performing cost-performance analyses/trade-offs. CAIV has refocused DTC to consider cost objectives for the total life cycle of the program and to view cost as an independent variable with the understanding it may be necessary to trade off performance to stay within cost objectives and constraints. DTC is now those actions which are undertaken to meet cost objectives through explicit design activities. Contractual implementation of DTC should go beyond simply incentivizing the contractor to meet cost commitments - it should also incentivize the contractor to seek out additional cost reduction opportunities.

**Design-to-Unit Production Cost (DTUPC)** Contractual provision which is the anticipated unit production price to be paid by the government for recurring production costs; based on a stated production quantity, rate, and time frame.

**Detailed Cost Estimate** See Engineering Cost Estimate.

**Detailed Live Fire Test and Evaluation (LFT&E) Plan** Describes the detailed test procedures, test conditions, data collection, and analysis processes to be used during the conduct of LFT&E.

**Detailed Live Fire Test and Evaluation (LFT&E) Report** Service report of the results and evaluation of all testing identified in the LFT&E strategy submitted to Director, Operational Test and Evaluation (DOT&E) no later than 120 days after test completion. The format of the report is a Service option; however, to facilitate the DOT&E independent report to the Congress, each service report should include the firing results, test conditions,

a description of any deviations approved subsequent to the preparation of the Detailed LFT&E Plan, test limitations, conclusions, and the evaluation of live fire vulnerability/lethality based on available information (if applicable).

**Determination and Findings (D&F)** A special form of written approval by authorized officials required by statute or regulation as prerequisite to taking certain contracting actions.

**Developing Activity/Agency (DA)** The command responsible for research and development (R&D) and production of a new item.

**Development** The process of working out and extending the theoretical, practical, and useful applications of a basic design, idea, or scientific discovery. Design, building, modification, or improvement of the prototype of a vehicle, engine, instrument, or the like as determined by the basic idea or concept. Includes all efforts directed toward programs being engineered for Service use but which have not yet been approved for procurement or operation, and all efforts directed toward development engineering and test of systems, support programs, vehicles, and weapons that have been approved for production and service deployment.

**Development Specification** States all necessary design requirements of a configuration/development item in terms of performance. Essential physical constraints are included. Development specifications state requirements for the development of items below the system level. They specify all of the required item functional characteristics and the tests required to demonstrate achievement of those characteristics.

**Developmental Test and Evaluation (DT&E)** Any engineering-type test used to verify status of technical progress, verify that design risks are minimized, substantiate achievement of contract technical performance, and certify readiness for initial operational testing. Development tests generally require instrumentation and measurements and are accomplished by engineers, technicians, or soldier operator-maintainer test personnel in a controlled environment to facilitate failure analysis.

**Deviation** A written authorization, granted prior to the manufacture of an item, to depart from a particular performance or design requirement of a specification, drawing, or other document for a specific number of units or a specified period of time.

**Direct Cost** Any cost specifically identified with a particular final cost objective. Is not necessarily limited to items that are incorporated into the end product as labor or material.

**Direct Engineering** Engineering effort directly related to specific end products.

**Direct Labor** Labor specifically identified with a particular final cost objective. Manufacturing direct labor includes fabrication, assembly, inspection, and test for constructing the

end product. Engineering direct labor consists of engineering labors such as reliability, quality assurance, test, design, etc., that are readily identified with the end product.

**Direct Labor Standard** A specified output or a time allowance established for a direct labor operation. Established by industrial engineers.

**Direct Materials** Includes raw materials, purchased parts, and subcontracted items required to manufacture and assemble completed products. A direct material cost is the cost of material used in making a product.

**Disposal** The act of getting rid of excess, surplus, scrap, or salvage property under proper authority. Disposal may be accomplished by, but not limited to, transfer, donation, sale, declaration, abandonment, or destruction.

**Disbursements** In budgetary usage, gross disbursements represent the amount of checks issued, cash, or other payments less refunds received. Net disbursements represent gross disbursements less income collected and credited to the appropriation of fund account, such as amounts received for goods and services provided. (See Outlays.)

**Discounting** The process of reducing a future amount to a present value.

**Documentation** Documents used in oversight and review of acquisition programs, including acquisition program baseline (APB), test and evaluation master plan (TEMP), selected acquisition report (SAR), and others. (See DoD 5000.2-R.)

**DoD Components** The Office of the Secretary of Defense (OSD); the military departments; the Chairman, Joint Chiefs of Staff (CJCS) and Joint Staff; the Unified Combatant Commands; the defense agencies; and DoD field activities.

**DoD Component Acquisition Executive (CAE)** A single official within a DoD Component who is responsible for all acquisition functions within that Component. This includes Service Acquisition Executives (SAEs) for the military departments and acquisition executives in other DoD Components, such as the U.S. Special Operations Command (USSOCOM) and Defense Logistics Agency (DLA), who have acquisition management responsibilities.

**DoD Directive (DoDD) 5000.1** "Defense Acquisition." The principal DoD directive on acquisition, it states policies and principles for all DoD acquisition programs and identifies the Department's key acquisition officials and forums.

**DoD Ethics Council** Charged with developing ethics programs for the acquisition workforce. Composed of the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) and military department secretaries, advised by the DoD Inspector General (DoDIG) and General Counsel. Executive Director is in Office of USD(A&T).

**DoD Regulation 5000.2-R** ("Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs") Sets forth mandatory procedures for MDAPs and MAISs and, specifically where stated, for other than MDAPs or MAISs. Authorizes milestone decision authorities (MDAs) to tailor procedures as they see fit consistent with statutory requirements.

**Domestic End Product** An unmanufactured end product mined or produced in the United States or an end product manufactured in the United States if the cost of its domestic (or qualifying country) components exceeds 50 percent of the cost of all its components.

**Down Select** To reduce the number of contractors working on a program by eliminating one or more for the next phase.

**Draft Request for Proposal (RFP)** Usually sent out to prospective industry bidders authorized by Government to receive it in advance of final RFP. Solicits contractors' recommendations to add, delete, or modify requirements, and gives them heads-up on what is anticipated.

**Dual Production** In NATO context, production of a weapon system in Europe and U.S. refers not only to independent production lines for entire systems, but also to interdependent components production. (See CoProduction.)

**Dual Source** Two contractors producing the same components or end items for the same program.

## E

**Early-On** An action should be taken at the beginning of an evolution (i.e., planning early-on in system development for adequate support.)

**Early Operational Assessment (EOA)** An operational assessment conducted prior to, or in support of, Milestone II.

**Earned Hours** The time in standard hours credited to a worker or group of workers as a result of their completion of a given task or group of tasks.

**Earned Value Management System (EVMS)** Industry developed set of 32 standards adopted for use by DoD in 1996 for evaluation of contractor management systems. A complete listing of the standards is contained in DoD 5000.2-R, Appendix VI. The EVMS replaced the Cost/Schedule Control Systems Criteria (C/SCSC) which contained 35 standards for evaluation of contractor management systems. Contractors with systems formally recognized by DoD as meeting the 35 C/SCSC standards prior to November 1996 are considered compliant with the 32 EVMS standards.

**Economic Analysis** A systematic approach to a given program, designed to assist the manager in solving a problem of choice. The full problem is investigated. Objectives and alternatives are searched out and compared in light of their benefits and costs through the use of an appropriate analytical framework.

**Economic Life** The period of time over which the benefits to be gained from a system may reasonably be expected.

**Economic Lot Size** The number of units of material or a manufactured item that can be purchased or produced within the lowest unit cost range. Its determination involves reconciling the decreasing trend in preparation unit costs and the increasing trend in unit costs of storage, interest, insurance, depreciation, and other costs incident to ownership, as the size of the lot is increased.

**Economic Ordering Quantity (EOQ)** The most economical quantity of parts to order at one time, considering the applicable procurement and inventory costs.

**Economic Production Rate** The most economically feasible rate at which an end item can be manufactured.

**Economies of Scale** Reductions in unit cost of output resulting from the production of additional units stem from increased specialization of labor as volume of output increases; decreased unit costs of materials; better utilization of management; acquisition of more efficient equipment; and greater use of by-products.

**Effective Competition** A marketplace condition that results when two or more manufacturing sources are acting independently of each other.

**Effectiveness** The extent to which the goals of the system are attained, or the degree to which a system can be elected to achieve a set of specific mission requirements. Also, an output of the cost effectiveness analysis.

**Efficiency Factor** The ratio of standard performance time to actual performance time, usually expressed as a percentage.

**Electromagnetic Interference (EMI)** Engineering term used to designate interference in a piece of electronic equipment caused by another piece of electronic or other equipment. Sometimes refers to interference caused by nuclear explosion.

**Electronic Counter-Countermeasures (ECCM)** The division of electronic warfare involving actions taken to insure friendly effective use of the electromagnetic, optical, and acoustic spectra despite the enemy's use of electronic warfare to include high power microwave techniques.

**Electronic Protect (EP)** The division of electronic warfare involving actions taken to protect personnel, facilities, or equipment from any effects of friendly or enemy employment of electronic warfare that degrade, neutralize, or destroy friendly capability.

**Element** A complete, integrated set of subsystems capable of accomplishing an operational role or function, such as navigation. It is the configuration item (CI) delivered by a single contractor.

**Embedded Computer Resources** Computer system physically incorporated (not necessarily within) into a larger system whose function is not data processing. Resources can be stand-alone, but still integral to a larger system, and used for other purposes provided the primary function is to support weapon systems. A subset of Mission Critical Computer Resources (MCCR). (See Mission Critical Computer Resources (MCCR).)

**Enactment** 1. Action by the Congress on the President's budget. Includes hearings, budget resolution, authorizations and appropriations acts. Result is appropriations (funding) for Federal Government. 2. Second of four phases in the DoD resource allocation process (RAP).

**End Item** The final production product when assembled, or completed, and ready for issue/deployment.

Engineering and Manufacturing Development (EMD) 1. The third phase in the acquisition process, following Milestone II. The principal objectives of this phase are to: translate the most promising design approach into a stable, interoperable, producible, supportable, and cost-effective design; validate the manufacturing process or production process; and demonstrate system capabilities through testing. Low Rate Initial Production (LRIP) usually occurs while the EMD Phase is still continuing as test results and design fixes or upgrades are incorporated. 2. A budget activity in the Research, Development, Test and Evaluation (RDT&E) appropriation.

**Engineering Change Proposal (ECP)** A proposal to the responsible authority recommending that a change to an original item of equipment be considered, and the design or engineering change be incorporated into the article to modify, add to, delete, or supersede original parts.

**Engineering Cost Estimate** Estimate derived by summing detailed cost estimates of the individual work packages and adding appropriate burdens. Usually determined by a contractor's industrial engineering, price analysts, and cost accountants.

Engineering Development Model (EDM) A production representative system that may be used during the Engineering and Manufacturing Development (EMD) phase to resolve design deficiencies, demonstrate maturing performance, and develop proposed production specifications and drawings. May also be used for initial operational test and evaluation (IOT&E).

**Environment** Includes the air, water, land, plants, animals, and other living organisms, man-made structures, historical and cultural resources, and the interrelationships that exist among them and with people.

**Environment, Operating** Used as an operational reference, environment includes the generic natural environment; e.g., weather, climate, ocean conditions, terrain, vegetation, electromagnetic, etc. Modified environment can refer to specific induced environments; e.g., "dirty" battlefield environment, nuclear-chemical-biological environment, etc. Environment includes those conditions observed by the system during operational use, stand-by, maintenance, transportation, and storage.

**Environmental Assessment** Contains an estimate of whether or not a proposed system will adversely affect the environment or be environmentally controversial, in which case an Environmental Impact Statement (EIS) is prepared.

**Environmental Impact Statement (EIS)** Detailed description of the effects, impacts, or consequences associated with designing, manufacturing, testing, operating, maintaining, and disposing of weapon or automated information system (AIS) systems.

**Equipment Scheduling and Loading** The effective and efficient loading of machines according to their capabilities to perform defined operations utilizing their maximum capability to assure attainment of the manufacturing schedule.

**Escalated Dollars** See Current-Year Dollars, Then-Year Dollars.

**Escalation** Use of a price index to convert past to present prices or of converting present to future prices; increase due to inflation and outlay rates for the type of equipment being acquired and the branch or the service involved.

**Estimated Cost at Completion (EAC)** Actual direct costs, plus indirect costs or allocable to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining.

**Evaluation Criteria** Standards by which accomplishments of required technical and operational effectiveness and/or suitability characteristics or resolution of operational issues may be assessed. (See Source Selection Plan (SSP).

**Event-Based Contracting** Supports "event-driven acquisition strategy" by linking specific contractual events to the "exit criteria" for the acquisition phase, or to intermediate development events established for the acquisition strategy.

**Event Driven Acquisition Strategy** An acquisition strategy that links program decisions to demonstrated accomplishments in development, testing, and production.

**Evolutionary Acquisition (EA)** An acquisition strategy approach characterized by the design, development, and deployment of a preliminary capability using current technology

that includes provisions for the evolutionary addition of future capabilities as requirements are further defined and technologies mature.

**Evolutionary Requirements Definition** Mission needs are first expressed in broad operational capability terms, then progressively evolved to system specific performance requirements. See Mission Need Statement (MNS) and Operational Requirements Document (ORD).

**Exclusive** (**Non-Exclusive**) **License** A license covering a patent(s), technical or proprietary data, technical assistance, know-how, or any combination of these, granted by a U.S. firm to a foreign firm or government to produce, co-produce, or sell a defense article or service within a given sales territory without competition from any other licenses or from the licenser. A nonexclusive license is a license as described as above, except that competition may be permitted with other licensees and/or the licenser.

**Executable Program** A program is executable if the program manager (PM) has adequate near-term approved funding.

**Execution** The operation of carrying out a program as contained in the approved budget. Often referred to as Budget Execution.

**Executive Branch** The principal acquisition participants within the Executive Branch, including the President, the DoD, the Office of Management and Budget (OMB), the Department of State, and the National Security Council (NSC). Their perspective is to formulate, direct, and execute national security policy.

**Executive Direction** Authority and guidance for defense acquisition from the Executive Branch in the form of Executive Orders (EOs) and national security directives from the President, and regulations from cabinet level departments and other federal agencies.

**Executive Service** See Lead Component Service.

Exit Criteria Program specific accomplishments that must be satisfactorily demonstrated before a program can progress further in the current acquisition phase or transition to the next acquisition phase. Exit criteria are normally selected to track progress in important technical, schedule, or management risk areas. The exit criteria shall serve as gates that, when successfully passed or exited, demonstrate that the program is on track to achieve its final program goals and should be allowed to continue with additional activities within an acquisition phase or be considered for continuation into the next acquisition phase. Exit criteria are some level of demonstrated performance outcome (e.g., level of engine thrust), the accomplishment of some process at some level of efficiency (e.g., manufacturing yield), or successful accomplishment of some event (e.g., first flight), or some other criterion (e.g., establishment of a training program or inclusion of a particular clause in the follow-on contract) that indicates that aspect of the program is progressing satisfactorily. Exit criteria are documented in the ADM.

**Expenditure** A charge against available funds, evidenced by voucher, claim, or other document, approved by a competent authority. Expenditure represents the actual payment of funds.

**Expense Limitation** The financial authority issued by a claimant to an intermediate level of command is an expense limitation. Amounts therein are available for issuance of operating budgets to responsibility centers.

**Expenses** Expired costs that are deducted from revenue for a given period. Cost of operation and maintenance of activities on the accrual basis over time, as distinguished from costs of acquisition of property.

**Expired Appropriation** An appropriation which is no longer available for new obligations because the time available for incurring such obligations has expired. Expired appropriations are maintained by fiscal year (FY) identity for 5 years. During this 5-year period, obligations may be adjusted if otherwise proper and outlays made from these accounts. Unobligated balances may not be withdrawn from expired accounts. After the 5-year period has elapsed, all obligated and unobligated balances are canceled and the expired account is closed.

**Extrapolation from Actual Costs** Extrapolation method requires prototype or preproduction actual cost data on the system considered. Primarily used in estimating the production cost of system hardware, and assumes a relationship (technical, performance) between cost of prototypes and production units. (See Cost Estimating Methodologies.)

 ${f F}$ 

**Fabrication** The construction of a part from raw material; the development of software code.

**Facilities** Includes the permanent, semi-permanent, or temporary real property assets required to operate and support the materiel system, including conducting studies to define types of facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment. One of the traditional elements of logistics support.

**Failure** The event in which any part of an item does not perform as required by its performance specification. The failure may occur at a value in excess of the minimum required in the specification, i.e., past design limits or beyond the margin of safety.

**Failure-Free Warranty (FFW)** A procurement methodology whose purpose is to bring the manufacturers, or design control agent, into the loop of continuously upgrading the field reliability of designated equipment(s).

**Fallback Position** Alternative (second choice) position.

**Family of Weapons** In NATO context, composed of related and complementary systems in a particular mission area.

**Fatigue** A physical weakening of material because of age, stress, or vibration.

**Fatigue Allowance** Time included in the production standard to allow for decreases or losses in production which might be attributed to worker fatigue. (Usually applied as a percentage of the leveled, normal, or adjusted time.)

**Feasibility Study** A study of the applicability or desirability of any management or procedural system from the standpoint of advantages versus disadvantages in any given case.

**Federal Acquisition Computer Network (FACNET)** FACNET allows the electronic interchange of procurement information between the private sector and the federal government and among federal agencies. FACNET allows federal agencies to electronically provide notice of solicitations for contracts, receive responses to solicitations and associated requests for information, provide public notice of contract awards, make payments to contractors, and archive data relating to each procurement action.

**Federal Acquisition Regulation (FAR)** The regulation for use by federal executive agencies for acquisition of supplies and services with appropriated funds. The FAR is supplemented by the Military Departments and by DoD. The DoD supplement is called the DFARS (Defense FAR Supplement).

**Fenced Funding** An identified aggregation of resources reviewed, approved, and managed as a distinct entity. The proposed program must be developed within directed resource limitations and the approved program must be implemented within specified resources.

**Fences** Fences, or resource levels, established for a particular program provide a way by which OSD or the Service headquarters can exert functional influence. Fences may just as appropriately be called ceilings and floors, used to protect resources.

**Fielding** See Deploy/Deployment.

**Figure of Merit** The numerical value assigned to a measure of effectiveness, parameter, or other figure, as a result of an analysis, synthesis, or estimating technique.

**Final Assembly** The joining together of the major sections to perform a complete unit.

**Firmware** The combination of a hardware device and computer instructions or computer data that reside as read-only software on the hardware device. The software cannot be readily modified under program control.

**First Article** First article includes preproduction models, initial production samples, test samples, first lots, pilot models, and pilot lots; and approval involves testing and evaluating the first article for conformance with specified contract requirements before or in the initial stage of production under a contract.

**First Article Testing (FAT)** Production testing that is planned, conducted, and monitored by the materiel developer. FAT includes preproduction and initial production testing conducted to ensure that the contractor can furnish a product that meets the established technical criteria.

**First Unit Equipped (FUE) Date** The scheduled date system or end item and its agreed upon support elements are issued to the designated initial operational capability unit and training specified in the new equipment training plan has been accomplished.

**Fiscal Guidance** Annual guidance issued by the Secretary of Defense (SECDEF), consistent with Defense Planning Guidance (DPG). Provides fiscal constraints that must be observed by DoD Components in the formulation of force structures and by the OSD and joint staff in reviewing proposed programs.

Fiscal Year (FY) U.S. Government: 1 October to 30 September (12 months).

**Fitness for Use** The effectiveness of the design, manufacturing, and support processes in delivering a system that meets the operational requirements under all anticipated operational conditions.

**Fixed Costs** Costs that do not vary with the volume of business, such as property taxes, insurance, depreciation, security, and minimum water and utility fees.

**Flexible Sustainment (FS)** A concept that provides procedural freedom to optimize life cycle costs through trade-offs which are accomplished either during initial or follow-on acquisition. The principal elements of FS are reliability based logistics (RBL) techniques and trigger based item management (TBIM). Both of these processes attempt to take maximum advantage of commercial industry capabilities and practices. (See Reliability Based Logistics (RBL) and Trigger Based Item Management (TBIM).)

**Float** The period of time that an activity may be delayed without becoming a critical activity.

**Flowchart** A graphical explanation of a particular process. In a production process, it usually includes symbols to allow recognition of operations, inspections, storage, etc.

**Flow Diagram** The paths of movement of workers and/or materials super-imposed on a graphical representation of the work area.

**Flow Process Chart** A graphical representation of the sequence of all operations, transportation, inspections, delays, and storage occurring during a process or procedure.

**Flow Time** The time required for a defined amount of work to be completed.

**Flyaway Costs** Costs related to the production of a useable end item of military hardware. Includes the cost of creating the basic unit (airframe, hull, chassis, etc.), an allowance for changes, propulsion equipment, electronics, armament, and other installed government-furnished equipment (GFE), and nonrecurring "start-up" production costs. Equates to Rollaway and Sailaway costs.

**Focal Point** In a particular organization (e.g., the headquarters of a major command) the principal point of contact for coordination and exchange of information related to cost/schedule control system criteria (C/SCSC) implementation or surveillance.

**Focused Logistics** A Joint Chiefs of Staff (JCS) initiative which seeks the fusion of information, logistics, and transportation technologies to provide rapid crisis response by allowing for the tracking and shifting of assets enroute and the delivery of tailored logistics and sustainment packages directly at the strategic, operational, or tactical level of operations.

Follow-On Operational Test and Evaluation (FOT&E) The test and evaluation (T&E) that may be necessary after Milestone III to refine the estimates made during operational test and evaluation (OT&E), to evaluate changes, and to reevaluate the system to ensure that it continues to meet operational needs and retains its effectiveness in a new environment or against a new threat.

**Force Levels** Number of aircraft, ships, troops, and other forces that are required to accomplish assigned tasks or missions. Normally identified by specified aircraft model, ship type, Army divisions, etc.

**Forces** Broadly, the fighting elements (combatant) of the overall defense structure; units, equipment, etc., shown in the future years defense program (FYDP).

**Force Structure** The composition of a Service, or all Services together, in terms of the number of major combat and support units, and their relationship to each other.

**Foreign Comparative Testing (FCT)** A DoD test and evaluation program that is prescribed in Title 10 U.S.C. §2350a(g), and is centrally managed by the Director, Test, Systems Engineering and Evaluation (DTSE&E). It provides funding for U.S. T&E of selected equipment items and technologies developed by allied countries when such items and technologies are identified as having good potential to satisfy valid DoD requirements.

**Foreign Military Sales (FMS)** That portion of U.S. security assistance authorized by the Foreign Assistance Act of 1961, and the Arms Export Control Act. The recipient provides reimbursement for defense articles and services transferred from the U.S. This includes cash sales from stocks (inventories, services, training) by the DoD.

**Foreign Weapon** For the purpose of the foreign comparative testing (FCT) program, a foreign weapon is any conventional item of military equipment, system, subsystem, munitions, or major component manufactured by a friendly or neutral country that is available or soon to be available for procurement by the U.S. Government.

**Form, Fit, and Function Data** Technical data pertaining to items, components, or processes for the purpose of identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements.

**Formal Agreement** A memorandum of understanding (MOU), a memorandum of agreement (MOA), or the equivalent, as defined in DoDD 5530.3.

**Forum for Armaments Cooperation** A formal body of accredited national representatives of two or more nations, with a definable membership and charter, meeting periodically—with proceedings of meetings documented for participants—for information exchange and discussion to harmonize operational concepts, doctrine, and procedures; standardize materiel requirements; explore opportunities for cooperative research, development, and acquisition; and/or agree on specific cooperative projects.

**Forward Financing** A procedure to use X-year money (primarily research, development, test, and evaluation (RDT&E)) in year X + 1. Primarily a USAF term. (See Forward Funding.)

**Forward Funding** Carry-over of research, development, test, and evaluation (RDT&E) funding (budget authority (BA)) into second year of appropriations availability. Requires permission from high authority.

**Forward Pricing** Prospective pricing of overhead and labor parts.

**Front End/Up Front** Planning or resource commitment at the beginning of the development process to anticipate later requirements and reduce future problems. (See Early-on.)

**Full and Open Competition** All responsible sources are eligible to compete. The standard for competition in contracting. Required by the Competition in Contracting Act (1984).

**Full Funding** The annual appropriation of funds for the total estimated costs to be incurred in the delivery of a given quantity of a usable end item. A budget rule applied to procurement and military construction.

**Full Operational Capability (FOC)** The full attainment of the capability to employ effectively a weapon, item of equipment, or system of approved specific characteristics, which is manned and operated by a trained, equipped, and supported military unit or force.

**Full Rate Production** Contracting for economic production quantities following stabilization of the system design and validation of the production process.

Functional/Formal Qualification Review (FQR) See System Verication Review

**Functional Analysis/Allocation (FA/A)** The examination of a function to identify all subfunctions necessary to the accomplishment of that function, and the identification of functional relationships and interfaces and the capturing of those relationships in a functional architecture. The subsequent flowdown of upper-level performance requirements to lower-level subfunctions.

**Functional Baseline** Documentation describing a system's/segments functional characteristics and the verification required to demonstrate the achievement of those specified functional characteristics. The system or segment specification establishes the functional baseline. (See System Specification)

**Functional Configuration Audit (FCA)** The formal examination of the functional characteristics of a configuration item (CI) as demonstrated by test data to verify that the item has achieved the performance specified in its functional or allocated configuration prior to acceptance.

**Functional Configuration Identification** The current approved or conditionally approved technical documentation for a system or configuration item as set forth in a functional specification and documents referenced therein.

**Functional Management** The process of planning, organizing, coordinating, controlling, and directing efforts within a structure which groups responsibilities according to the type of work to be performed.

**Functional Specialists** Specialists who assist and exercise surveillance over lower levels of management. (For example, logisticians, test and evaluation (T&E) experts, etc.)

**Functional Support** Systematized methodologies and procedures, or a common set of standards applied to materiel acquisition programs, which include but are not limited to personnel, technical requirements, security, automated data processing, cost analysis, training, safety, audit, logistics, product assurance, reliability, equal employment opportunity, obligation planning and reporting, industrial preparedness, value engineering, test, public affairs, legal, inspector general, mobilization, contracting, international cooperation, and small business.

**Functional (Traditional) Organization** The classic organization. Typically a service or one product structure, with clear lines of authority in functional areas reporting ultimately to one head. Military services are functional organizations. (See Hierarchical Organization.)

Fund Availability The status of obligation authority.

**Funding Profile** Program funding, usually displayed in columnar spread sheet format by years, starting with previous year through current year and out-years.

**Funding Wedge** Initial funding estimate used to get a program recognized in the future years defense program (FYDP).

**Fund Subdivision** A segment of an appropriation or other fund, created by funding action as an administrative means of controlling obligations and expenditures within an agency.

**Future Years Defense Program (FYDP)** The official DoD document which summarizes forces and resources associated with programs approved by the Secretary of Defense (SECDEF). Its three parts are the organizations affected, appropriations accounts (research, development, test, and evaluation (RDT&E), operations and maintenance (O&M), etc.), and the 11 major force programs (strategic forces, airlift/sealift, R & D, etc.). The primary data element in the FYDP is the Program Element (PE).

G

**Gantt Chart** A graphic portrayal of a project which shows the activities to be completed and the time to complete represented by horizontal lines drawn in proportion to the duration of the activity. Some Gantt Charts will be able to show the float for the activity.

**General Accounting Office (GAO)** An agency of the Legislative Branch, responsible solely to the Congress, which functions to audit all negotiated government office contracts and investigate all matters relating to the receipt, disbursement, and application of public funds. Determines whether public funds are expended in accordance with appropriations.

General and Administrative (G&A) Costs Any management, financial, or other expense incurred or allocated to a business unit for the general management and administration of the business unit as a whole.

**General Provisions** The mandatory (by law or regulation) clauses for all DoD contracts for the type of procurement involved—sometimes called "boiler plate." The clauses devised particularly for the procurement are called Special Provisions.

**General Purpose Test Equipment** Mechanical, hydraulic, electrical, electronics, or other test equipment which, without modification or alteration, has more than one use and is not limited to a special or peculiar research, development, production, maintenance, or test application.

**General Specification** A general specification covers requirements common to two or more types, classes, grades, or styles of products, services, or materials avoiding the repetition of common requirements in detail specifications. It also permits changes to common requirements to be readily effected. General specifications may also be used to cover common requirements for weapon systems and subsystems.

**Get Well** To solve a program problem. Usually implies requirement for, or discovery of, additional funding.

**Given** A premise, fact, or assumption generally universally accepted at the outset.

**Goal** Something to which one aspires for a program, or a point aimed at for achievement.

Goldwater-Nichols Name given to the Defense Reorganization Act of 1986, which restructured certain aspects of DoD management. Named for Senator Barry Goldwater and Representative Bill Nichols, co-authors.

**Goods** Any articles, materials, supplies, or manufactured products, including inspection and test equipment. The term excludes technical data.

**Go No Go** The decision on whether or not to proceed (with a program).

**Government-Owned Contractor-Operated (GOCO)** A manufacturing plant that is owned by the government and operated by a contractual civilian organization.

**Government-Owned Government-Operated (GOGO)** A manufacturing plant that is both owned and operated by the government.

Government Acquisition Quality Assurance The function by which the government determines whether a contractor has fulfilled contractual obligations pertaining to quality and quantity.

Government Furnished Equipment (GFE) See Government Furnished Property (GFP).

Government Furnished Material (GFM) Material is government property which may be incorporated into or attached to an end item to be delivered under a contract or which may be consumed in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies, and small tools and supplies.

**Government Furnished Property (GFP)** Property in the possession of or acquired directly by the government, and subsequently delivered to or otherwise made available to the contractor.

Government Purpose License Rights Rights to use, duplicate, or disclose technical data for government purposes only, and to have or permit others to do so for government purposes only. Government purposes include competitive procurement, but do not include the right to permit others to use for commercial purposes.

**Grass Roots Cost Estimate** See Engineering Cost Estimate.

**Guarantee** Congressional language term for contractor warranty. (See Warranty.)

## H

**Handling** The coordination and integration of all operations embracing packaging, protection, and movement of material by available equipment for short distances.

Hardness See Nuclear, Biological and Chemical Hardness.

**Hardware** 1. Computers: The physical equipment which makes up a computer system, e.g., terminals and storage devices, as opposed to programming software. 2. Weapons, combat equipment, and support equipment.

**Harmonization** Refers to the process, or results, of adjusting differences or inconsistencies in the qualitative basic military requirements of the United States, its allies, and other friendly countries. It implies that significant features will be brought into line so as to make possible substantial gains in terms of the overall objectives of cooperation (e.g., enhanced utilization of resources, standardization, and compatibility of equipment). It implies especially that comparatively minor differences in "requirements" should not be permitted to serve as a basis for the support of slightly different duplicative programs and projects.

**Head of Agency** In DoD, the Secretary of Defense (SECDEF), and the Secretaries of the Army, Navy, and Air Force are heads of agencies. Subject to the direction of the SECDEF, the Under Secretary of Defense (Acquisition & Technology) (USD(A&T)), the Director of Defense Procurement, and the directors of the defense agencies have been delegated authority to act as head of agency for their respective agencies (i.e., to perform functions under the Federal Acquisition Regulation (FAR) or DoD FAR Supplement (DFARS) reserved to an agency head), except for such actions that by terms of statute, or any delegation, must be exercised within the Office of the Secretary of Defense (OSD). Title 10 U.S.C. §167 provides the Commander-in-Chief (CINC) Special Operations Command with head of agency authority similar to that of the service secretaries.

**Head of Contracting Activity (HCA)** Agency head authorized to contract for supplies and services. May be delegated to major command heads within an agency. Title is by virtue of position. (See Contracting Activity.)

**Heartburn Appeal** An appeal issue that seeks to reverse or amend a decision by a congressional committee adversely affecting the budget. In particular it is an appeal issue identified as being of major concern to the Secretary of Defense (SECDEF), that is addressed to the chairperson of the next committee scheduled to mark up the budget request. Also, any specific negative reaction to a proposal.

(**Out of**) **Hide** Means of funding program, perhaps not planned or scheduled, out of existing service funds without receiving any outside help from the Congress or OSD.

**Hierarchical Organization** The classical or traditional type of organization with one person in charge (program manager (PM)) of functional areas (budget, engineering, logistics, etc.) which can be further broken into sub-elements. For example: The PM is at the bottom of the hierarchical ladder; the PM reports up the chain to a Program Executive Officer (PEO); the PEO reports up to the Service Acquisition Executive (SAE); and the SAE reports to the Defense Acquisition Executive (DAE) who is at the top of the organizational structure.

**Highly Sensitive Classified Program** An acquisition special access program established in accordance with DoD 5200. 1-R, "Information Security Program Regulation," and managed in accordance with DoD Directive 0-5205.7, "Special Access Program Policy" and DoDD 5000.1.

**Hit** Move by the Congress or comptroller to reduce the service or activity budget, usually by percentage of total obligation authority or a set amount.

**Horizontal Technology Integration** Application of common enabling technologies across multiple systems within a force to increase force effectiveness. (Army)

**Host Nation Support** Civil and military assistance provided by host nations to allied forces and organizations in peace, transition to war, and wartime.

**Human Factors** The systematic application of relevant information about human abilities, characteristics, behavior, motivation, and performance. It includes principles and applications in the areas of human engineering, anthropometrics, personnel selection, training, life support, job performance aids, and human performance evaluation.

**Human Performance** The ability of actual users and maintainers to meet the system's performance standards, including reliability and maintainability, under the conditions in which the system will be employed.

**Human Systems Integration** A disciplined, unified, and interactive approach to integrate human considerations into system design to improve total system performance and reduce costs of ownership. The major categories of human considerations are manpower, personnel, training, human factors engineering, safety, and health.

I

"**Ilities**" The operational and support requirements a program must address (e.g., availability, maintainability, vulnerability, reliability, logistic supportability, etc.)

**Idle Time** A time interval during which either the worker, the equipment, or both do not perform useful work.

**Implementation** The publication of directives, instructions, regulations, and related documents that define responsibilities and authorities and establish the internal management processes necessary to implement the policies or procedures of a higher authority.

**Implemented Project** A cooperative project for which, subsequent to DoD Component or the Office of the Secretary of Defense (OSD) approval, agreements with one or more allied or friendly nations have been signed and Component funds or funds for cooperative research and development (R&D) under Title 10 U.S.C. §2350a, have been authorized and released.

**Implementing Command** The command responsible for the acquisition and/or modification of the system (USAF).

**Impoundment** An action by the President that prevents the obligation or expenditure of budget authority. Deferrals and rescissions are the two types of presidential impoundment.

**Impoundment Resolution** Whenever all or part of any budget authority provided by the Congress is deferred the President must transmit a message to the Congress describing the deferrals. Either House may, at any time, pass a resolution disapproving this deferral of budget authority, thus requiring that the funds be made available for obligation. When no congressional action is taken, deferrals may remain in effect until, but not beyond, the end of the fiscal year (FY). If the funds remain available beyond the end of a FY and continued deferral of their use is desired, the President must transmit a new special message to the Congress. (See Deferral of Budget Authority; Impoundment.)

**Incentive** Motivating the contractor in calculable monetary terms to turn out a product that meets significantly advanced performance goals, to improve on the contract schedule up to and including final delivery, to substantially reduce costs of the work, or to complete the project under a weighted combination of some or all of these objectives.

**Incremental Funding** The provision (or recording) of budgetary resources for a program or project based on obligations estimated to be incurred within a fiscal year (FY) when such budgetary resources will cover only a portion of the obligations to be incurred in completing the program or project as programmed. This differs from full funding, where budgetary resources are provided or recorded for the total estimated obligations for a program or project in the initial year of funding. (For distinction, see Full Funding.) Most commonly used for research and development (R&D) as opposed to production, which must be fully funded.

**Indefinite Quantity Contract** Provides for furnishing an indefinite quantity, within stated limits, of specific supplies or services, during a specified contract period, with deliveries to be scheduled by the timely placement of orders upon the contractor by activities designated either specifically or by class.

**Independent Cost Analysis (ICA)** An analysis of program office and/or Component life cycle cost estimates conducted by an impartial body disassociated from the management of the program.

**Independent Cost Estimate (ICE)** A life cycle cost estimate for ACAT I programs prepared by an office or other entity that is not under the supervision, direction, or control of the military department, defense agency, or other component of the DoD that is directly responsible for carrying out the development or acquisition of the program, or if the decision authority has been delegated to a Component, prepared by an office or other entity that is not directly responsible for carrying on the development or acquisition of the program.

**Independent Government Cost Estimate (IGCE)** An estimate of the cost for goods and/or estimate of services to be procured by contract. Such estimates are prepared by government personnel, i.e., independent of contractors.

**Independent Research and Development (IR&D)** Technical effort by industry which is not sponsored by, or required in performance of, a contract and which consists of projects falling within the areas of basic and applied research, development, and systems and other concept formulation studies. Also, discretionary funds which industry can allocate to projects.

**Independent Verification And Validation (IV&V)** An independent review of the software product for functional effectiveness and technical sufficiency.

**Indirect Cost Pool** A grouping of incurred costs identified with two or more cost objectives, but not specifically identified with any final cost objective.

**Indirect Costs** Costs which, because of their incurrence for common or joint objectives, are not readily subject to treatment as direct costs.

**Industrial Base** That part of the total private and government owned industrial production and depot level equipment and maintenance capacity in the United States and its territories and possessions, and Canada. It is or shall be made available in an emergency for the manufacture of items required by the U.S. military services and selected allies.

**Industrial Base Factors Analysis** An industrial base factors analysis is prepared to assess the near-term and long-range effect of a proposed international agreement on the U.S. defense industrial base. The analysis is to address both the immediate effort and the projected development, production, and/or support of any proposed follow-on effort. Effects on prime and sub-tier industries are considered. This information is required for all proposed international agreements for research, development, and/or production of defense items.

**Industrial Capability** That part of the total privately owned and government owned industrial production and depot level equipment and maintenance capacity in the United States and its territories and possessions, as well as capacity located in Canada, that is, or shall be made available in an emergency, for the manufacture of items required by the U.S. military services and selected allies.

**Industrial Capability Analysis** An analysis of the industrial capability to design, develop, support, and if appropriate, restart an acquisition program (10 USC 2440). It is a required part of the acquisition strategy for ACAT I programs.

**Industrial Engineering/Detailed Estimate** The art and science of utilizing and coordinating personnel, equipment, and materials to attain a desired quantity of output at a specified time and at an optimum cost. This may include gathering, analyzing, and acting upon facts pertaining to building and facilities, layouts, personnel organization, operating procedures, methods, processes, schedules, time standards, wage rates, wage-payment plans, costs, and systems for controlling the quality and quantity of goods and services.

**Industrial Facilities** Industrial property (other than material, special tooling, military property, and special test equipment) for production, maintenance, research and development (R&D), or test, including real property and rights therein, buildings, structures, improvements, and plant equipment (IPE).

**Industrial Fund (IF)** A revolving fund established at DoD industrial type activities where products or services are provided to external users. The purpose of the fund is to provide a more effective means of controlling costs; establish a flexible means for financing, budgeting and accounting; encourage the creation of buyer-seller relationships; place budgeting, and accounting on a more commercial basis; and encourage cross-servicing between military departments. Charges to the fund are made for procurement of materials, services, and labor, and the fund is reimbursed by proceeds from the sale of products and services.

**Industrial Mobilization** The process of marshaling the industrial sector to provide goods and services, including construction, required to support military operations and the needs of the civil sector during domestic or national emergencies. It includes the mobilization of materials, labor, capital, facilities, and contributory items and services. Mobilization activities may result in some disruption to the national economy.

**Industrial Plant Equipment (IPE)** That part of planned equipment exceeding defined acquisition cost thresholds, used for the purpose of cutting, abrading, grinding, shaping, forming, joining, testing, measuring, heating, treating, or otherwise altering the physical, electrical, or chemical properties of materials, components, or end items, entailed in manufacturing, maintenance, supply, processing, assembly, or research and development (R&D) operations.

**Industrial Preparedness** The state of preparedness in industry to produce essential materiel to support the national military objectives.

**Industrial Resource Analysis** A discrete analysis of industrial base capabilities conducted to determine availability of production resources required to support a major system production program.

**Industry** The defense industry (private sector contractors) includes large and small organizations providing goods and services to DoD. Their perspective is to represent interests of the owners or stockholders.

**Information Assurance** Information operations that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for the restoration of information systems by incorporating protection, detection, and reaction capabilities.

**Information Gathering and Analysis** The specific actions taken to gain information about a system element or critical acquisition process for which the level of knowledge is insufficient to permit an informed decision to be made with respect to other risk handling options.

**Information Operations** Actions taken to affect adversary information and information systems while defending one's own information and information systems.

**Information System** A discrete set of information resources (e.g., personnel, data, software, computers, communications equipment) organized for the collection, processing, maintenance, use, sharing, dissemination or disposition of information.

**Information Technology (IT)** Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or

information by an executive agency. IT includes computers, ancillary equipment, software, firmware and similar procedures, services and related resources.

**Information Technology Management Strategic Plan** Plan which provides overall direction and guidance for the use and management of information resources across the DoD.

**Information Warfare** Actions taken to achieve information superiority by affecting adversary information, information-based processes, information systems, and computer-based networks while defending one's own information, information-based processes, information systems, and computer-based networks.

**Infrastructure** Generally applicable for all fixed and permanent installations, fabrications, or facilities for the support and control of military forces. (JCS)

**Inherent Availability** Availability of a system with respect only to operating time and corrective maintenance. It ignores standby and delay times associated with preventive maintenance as well as administrative and logistics down time.

**Inherent Reliability and Maintenance (R&M) Value** Any measure of reliability or maintainability that includes only the effects of item design and installation, and assumes an ideal operating and support environment.

**Initial Operational Capability (IOC)** The first attainment of the capability to employ effectively a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained and equipped personnel necessary to operate, maintain, and support the system. It is normally defined in the Operational Requirements Document (ORD).

**Initial Operational Test and Evaluation (IOT&E)** Operational test and evaluation conducted on production, or production representative articles, to determine whether systems are operationally effective and suitable, and which supports the decision to proceed beyond low rate initial production (LRIP).

**Initial Provisioning** The process of determining the range and quantity of items (i.e., spares and repair parts, special tools, and test and support equipment) required to support and maintain an item for an initial period of service. Its phases include the identification of items of supply, the establishment of data for catalog, technical manual and allowance list preparation, and the preparation of instructions to assure delivery of necessary support items with related end articles.

**Initial Spares** Items procured for logistics support of a system during its initial period of operation.

**In Process Inventory Control** The process whereby materials and parts are effectively and efficiently planned and controlled to assure their availability at the required stage of production.

**In-Process Review/Interim Program Review (IPR)** Review of a project or program at critical points to evaluate status and make recommendations to the decision authority.

**Inspection** Visual examination of the item (hardware and software) and associated descriptive documentation which compares appropriate characteristics with predetermined standards to determine conformance to requirements without the use of special laboratory equipment or procedures.

**Installation** A fixed or relatively fixed location together with its real estate, buildings, structures, utilities, and improvement thereon. It is usually identified with an existing or potential organization and missions or functions.

**Integrated Baseline Review** The program manager's review of a contractor's performance measurement baseline. It is conducted by program managers and their technical staffs or Integrated Product Teams (IPTs) on contracts requiring compliance with DoD EVMS criteria or Cost/Schedule Status Report (CSS/R) requirements within six months after contract award.

**Integrated Concept Team (ICT)** Multidisciplinary teams representing appropriate Army commands and staff, and appropriate DoD organizations, other Federal agencies, industry and academia that looks at requirements solutions that have resulted from review of the Doctrine, Training, Leader Development, Organization, Materiel, Soldier (DTLOMS) structure. (Army)

**Integrated Diagnostics** An initiative for delivering weapon systems designed for ease of maintenance (with built-in diagnostics) with less test equipment and fewer maintenance specialists. Suggested by industry, it enhances military capabilities by increasing survivability of the support structure and by reducing the logistics task which could degrade unit mobility. By combining the diagnostics equipment into an integrated system, maintenance quality improves.

**Integrated Product and Process Development (IPPD)** A management technique that simultaneously integrates all essential acquisition activities through the use of multidisciplinary teams to optimize the design, manufacturing, and supportability processes. IPPD facilitates meeting cost and performance objectives from product concept through production, including field support. One of the key IPPD tenets is multidisciplinary teamwork through Integrated Product Teams (IPTs).

**Integrated Product Team (IPT)** Team composed of representatives from appropriate functional disciplines working together to build successful programs, identify and resolve issues, and make sound and timely recommendations to facilitate decision making. There

are three types of IPTs: overarching IPTs (OIPTs) focus on strategic guidance, program assessment, and issue resolution; working level IPTs (WIPTs) identify and resolve program issues, determine program status, and seek opportunities for acquisition reform; and program level IPTs focus on program execution and may include representatives from both government and after contract award industry.

**Integration** Actions taken within a program office using the IPPD process to ensure the various functional disciplines of systems acquisition management are appropriately considered during the design, development and production of a defense system.

**Intellectual Property** Includes inventions, trademarks, patents, industrial designs, copyrights, and technical information including software, data designs, technical know-how, manufacturing information and know-how, techniques, technical data packages, manufacturing data packages, and trade secrets.

**Interchangeability** A condition which exists when two or more items possess such functional and physical characteristics as to be equivalent in performance and durability, are capable of being exchanged one for the other without alteration on the items themselves or of adjoining items, except for adjustment, and without selection for fit and performance.

**Interconnection** The linking together of interoperable systems.

**Interface** The functional and physical characteristics required to exist at a common boundary or connection between persons, or systems, or between persons and systems.

**Interference Time** A period of time during which one or more machines are not operating because the worker or workers assigned to operate them are busy operating other machines in their assignment or are performing necessary duties related to operating other machines such as making repairs, cleaning the machines, or inspecting completed work.

**Interim Contractor Support** Temporary contractor support that allows the Service to defer investment in all or part of the support resources (spares, technical data, support equipment, training equipment, etc.) while the organic capability is being phased in.

**Intermediate Level Maintenance** That level which maintains/repairs items for which the organizational level is incapable, but which do not have to go to depot level for major work.

**Internal Audit** The independent appraisal activity within an organization for the review of the accounting, financial, and related operations as a basis for protective and constructive services to management.

**Internal Control** Internal review and internal checks established by the commanding officer to safeguard property and funds; to check accuracy, reliability, and timeliness of accounting data to promote operational efficiency; and to ensure adherence to prescribed management policies and procedures.

**Internal Replanning** Replanning actions performed by the contractor for the remaining effort within the recognized total allocated budget.

International Agreement An agreement concluded with one or more foreign governments or an international organization that is signed or agreed to by any DoD Component personnel; signifies the intent of the parties to be bound by international law; and is denominated as an international agreement or an memorandum of understanding (MOU), memorandum of agreement (MOA), exchange of notes or letters, technical arrangement, protocol, note verbal, aide memoir, contract, arrangement, or any other name connoting a similar legal consequence.

**Interoperability** The ability of systems, units, or forces to provide services to or accept services from other systems, units, or forces and to use the services so exchanged to operate effectively together. The conditions achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users.

**Inventory Control Point (ICP)** The organizational element within a distribution system which is assigned responsibility for system-wide direction and control of materiel including such management functions as the computation of requirements, the initiation of procurement or disposal actions, the development of worldwide quantitative and monetary inventory data, and the positioning and repositioning of materiel.

**Inventory Objective** The quantity of an item of material that will satisfy the military requirement under specified mobilization conditions. It is based on threat analysis, approved U.S. force projections, combat usage, mobilization training usage, and production capabilities. It does not include quantities required to replace those units consumed, lost, or worn out in the peacetime period which are included in programmed procurement objectives.

**Investments/Investment cost** Research, development, test, and evaluation (RDT&E) and production dollars for a system.

**Invitation for Bid (IFB)** A solicitation document used in sealed bidding.

**Issue** Something in dispute or to be decided.

**Issue Cycle** A process followed during the Office of the Secretary of Defense (OSD) review of the program objectives memorandum (POM). It begins in May or June and extends into July and August.

**Issue Papers** The Office of the Secretary of Defense (OSD) documents defining issues raised during review of the program objectives memorandum (POM).

**Item Detail Specification** A program unique specification usually approved as part of the product baseline (formerly called a "C specification").

**Item Performance Specification** A program unique specification usually approved as part of the allocated baseline (formerly called a "B specification").

Items of Intrinsic Military Utility End items other than those identified in the "DoD Militarily Critical Technologies List" whose transfer to potential adversaries shall be controlled for the following reasons: the end product in question could significantly enhance the recipient's military or war-making capability either because of its technology content or because of the quantity to be sold; or, the product could be analyzed to reveal U.S. system characteristics and thereby contribute to the development of countermeasures to equivalent U.S. equipment.

**Iteration** Repetitive requirement. For examples, numerous re-drafts of a document, or reworking a funding profile to satisfy everyone involved.

J

**Job Analysis** A detailed examination of a job to determine the duties, responsibilities, and specialized requirements necessary for its performance.

**Job Lot** A relatively small number of a specific type of part or product that is produced at one time.

**Job Order** 1. A formal instruction to perform certain work according to specifications, estimates, etc. 2. Descriptive of a cost system whereby costs are accumulated by job orders.

**Job Shop** A manufacturing enterprise devoted to producing special or custom-made parts of products usually in small quantities for specific customers.

**Joint Acquisition Program** A directed joint effort for the development and procurement of systems, sub-systems, equipment, software, or munitions as well as supporting equipment or systems, with the goal of providing a new or improved capability for a validated joint need. Certain modification programs may be included when they are determined to be of significant interest or priority to the participating services.

**Joint Logistics Commanders (JLC)** Senior logistics military officers of the U.S. Army, U.S. Navy, Marine Corps, U.S. Air Force and Defense Logistics Agency (DLA). Includes the Commander, U.S. Army Materiel Command; Deputy Chief of Naval Operations (Logistics); Deputy Chief of Staff (Installations and Logistics), USMC; Commander, Air Force Materiel Command; and Director, DLA.

**Joint Mission Need Statement** A mission need statement (MNS) that documents a mission operational capability need that applies to and is supported by two or more military services. (See Mission Need Statement (MNS).)

Joint Operating Procedures (JOPs) These documents should identify and describe detailed procedures and interactions necessary to carry out significant aspects of a joint program. Subjects for JOPs may include systems engineering (SE), personnel staffing, reliability, survivability, vulnerability, maintainability, production, management controls and reporting (including selected acquisition report (SAR)), financial control, test and evaluation (T&E), training, logistics support, procurement and deployment. The JOPs are developed and negotiated by the program manager (PM) and the participating Services.

**Joint Program** Any Defense acquisition system, subsystem, component, or technology program that involves formal management or funding by more than one DoD Component during any phase of a system's life cycle.

Joint Requirements Oversight Council (JROC) Assists the Chairman, Joint Chiefs of Staff in identifying and assessing the priority of joint military requirements (including existing systems and equipment) to meet the national military strategy. The Vice Chairman of the Joint Chiefs of Staff (VCJCS) chairs the Council and decides all matters before the Council. The permanent members include the Vice Chiefs of the U.S. Army (VCSA) and U.S. Air Force (VCSAF), the Vice Chief of Naval Operations (VCNO), and the Assistant Commandant of the Marine Corps (ACMC). The Council directly supports the Defense Acquisition Board (DAB) through the review, validation, and approval of key cost, schedule, and performance parameters at the start of the acquisition process, prior to each milestone review, or as requested by the Under Secretary of Defense for Acquisition and Technology (USD(A&T)).

**Joint Technical Architecture (JTA)** A common set of mandatory information technology standards and guidelines to be used by all emerging systems and systems upgrades including Advanced Concept Technology Demonstrations. The JTA is applicable to C4I and automated information systems and the interfaces of other key assets with C4I systems (e.g., weapons systems, sensors) with C4I systems.

**Joint Working Group (JWG)** Composed of representatives for the combat and materiel developers and appropriate subject matter experts. The primary purpose is to provide a forum for direct communication facilitating the coordination of requirements documents.

**Justification and Approval (J&A)** A document required by the Federal Acquisition Regulation (FAR) that justifies and obtains approval for contract solicitations that use other than full and open competition.

**Just-In-Time** (**JIT**) A "pull" system, driven by actual demand. The goal is to produce or provide one part just-in-time for the next operation. Reduces stock inventories, but leaves no room for schedule error. As much a managerial philosophy as it is an inventory system.

## K

**Key Performance Parameters (KPPs)** Those capabilities or characteristics so significant that failure to meet the threshold value of performance can be cause for the concept or system selected to be reevaluated or the program to be reassessed or terminated. KPP's are a critical subset of all the performance parameters found in the ORD, and are included in the performance portion of the APB. KPP's are validated by the JROC for ACAT I programs. For ACAT IA programs, KPP's are validated by the JROC or cognizant PSA.

**Know-how** Includes both the know-how of design and manufacturing and the know-how and related technical information that is needed to achieve a significant development, production, or use. The term know-how includes services, processes, procedures, specifications, design data and criteria, and testing techniques.

**Known-Unknowns** Future situations where it is possible to plan for or predict in part. For example, schedule changes are certain, but the extent of the changes are unknown.

## L

**Labor Productivity** The rate of output of a worker or group of workers per unit of time, usually compared to an established standard or expected rate of output.

**Labor Standards** A compilation by time study of standard time for each element of a given type of work.

**Land Based Test Site (LBTS)** A facility duplicating/simulating as many conditions as possible of a system's planned operational installation and utilization. (Navy)

**Lapsed Funds** See Expired Appropriations.

**Lead Component/Service** The DoD component responsible for management of a system acquisition involving two or more DoD components in a joint program.

**Leader-Follower Concept** A government contractual relationship for the delivery of an end item through a prime or subcontract relationship or to provide assistance to another company. 1. Prime contract awarded to established source (leader) who is obligated to subcontract to and assist another source (follower). 2. A contract is awarded requiring the leader to assist the follower who has the prime contract for production. 3. Prime contract awarded to the follower for production; follower is obligated to subcontract with a designated leader for assistance. (The leader may be producing under another contract.)

**Learning/Improvement Curve** A mathematical way to explain and measure the rate of change of cost (in hours or dollars) as a function of quantity.

**Legislative Affairs/Liaison (LA/LL)** The interaction between DoD (the Office of the Secretary of Defense (OSD), services, and agencies) and the Congress that includes responses to requests for information, preparation of reports, appearances at hearings, etc. Usually coordinated by and conducted through service or agency legislative liaison offices.

Legislative Branch Defense acquisition interests in the Legislative Branch (the Congress) include the "Defense Committees" such as the Senate Armed Services Committee (SASC), the House National Security Committee (HNSC), Senate and House Appropriations Committees, the Senate and House Budget Committees, other committees having legislative oversight of defense activities, congressional staff, individual Members of the Congress, the Congress as a body, the Congressional Budget Office (CBO), and the General Accounting Office (GAO).

**Lessons Learned** Capitalizing on past errors in judgment, material failures, wrong timing, or other mistakes ultimately to improve a situation or system.

**Lethality** The probability that weapon effects will destroy the target or render it neutral.

**Letter Contract** See Undefinitized Contractual Action.

**Leveled Time** The average time adjusted to account for the difference in operator performance, such as skill, effort, and conditions.

**Level of Effort (LOE)** Effort of a general or supportive nature which does not produce definite end products or results, i.e., contract for man-hours.

**Level of Openness** The level (system, subsystem, or component) at which interfaces conform to open standards. The level of openness determines the extent to which a system can use multiple suppliers, insert new technology and assign control on design, interfaces, repair, and implementation to the contractor/supplier.

Level of Repair/Analysis (LOR/A) See Optimum Repair Level Analysis.

**Leverage** The power to act or influence to attain goals or gains. Also, an amplification.

**Licensed Production** 1. Agreements by U.S. commercial firms with foreign governments/firms to produce foreign weapon systems. 2. Overseas production of a U.S. origin defense article based on transfer of technical information under commercial arrangements between a U.S. manufacturer and a foreign government or producer. U.S. Government involvement is limited to issuance of an export license.

**Life Cycle Cost (LCC)** The total cost to the government of acquisition and ownership of that system over its useful life. It includes the cost of development, acquisition, operations, and support (to include manpower), and where applicable, disposal.

**Life Cycle Management (LCM)** A management process, applied throughout the life of a system, that bases all programmatic decisions on the anticipated mission-related and economic benefits derived over the life of the system.

**Life Cycle (Weapon System)** All phases of the system's life including research, development, test and evaluation (RDT&E), production, deployment (inventory), operations and support (O&S), and disposal.

**Life Units** A measure of use duration applicable to the item (such as operating hours, cycles, distance, rounds fired, and attempts to operate).

**Limited Rights** Rights to use, duplicate, or disclose technical data (TD) in whole or in part, by or for the government, with the express written permission of the party furnishing the TD to be released or disclosed outside the government

**Line Authority** DoD officials in the direct chain of authority from the Secretary of Defense (SECDEF) to the program manager (PM), excluding staffs. The authority to give an order in their own name.

**Line Item (Budget)** A specific program end item with its own identity (e.g., B-1B Bomber).

**Line of Balance** (LOB) A graphic display of scheduled units versus actual units produced over a given set of critical schedule control points on a particular day.

**Line Production** A method of plant layout in which the machines and other equipment required, regardless of the operations they perform, are arranged in the order in which they are used in the process (lay-out by product).

**Line Replaceable Unit (LRU)** An essential support item removed and replaced at field level to restore an end item to an operationally ready condition. (Also called Weapon Replacement Assembly and Module Replaceable Unit.)

**Line Stock** Parts or components (screws, washers, solder, common resistors, etc.) which are physically identifiable with the product, but which are of very low value, and therefore do not warrant the usual item-by-item costing techniques.

**Live Fire Test and Evaluation (LFT&E)** A test process that is defined in Title 10 U.S.C. §2366, that must be conducted on a covered system, major munition program, missile program, or product improvement to a covered system, major munition program, or missile program before it can proceed beyond low rate initial production (LRIP). A covered system is any vehicle, weapon platform, or conventional weapon system that includes features

designed to provide some degree of protection to the user in combat and that is an acquisition category (ACAT) I or ACAT II program.

**Live Fire Test and Evaluation** (**LFT&E**) **Plan** See Detailed Live Fire Test and Evaluation Plan.

Live Fire Test and Evaluation Report Report prepared by the Director, Operational Test and Evaluation (DOT&E) on survivability and lethality testing. Submitted to the Congress for covered systems prior to the decision to proceed beyond low rate initial production (LRIP). (For component reports, see Detailed Live Fire Test and Evaluation Report.)

Living Specification A specification in which requirements concentrate on form, fit, and function. These requirements are formatted to accommodate readily the insertion of new technology products and advanced manufacturing processes. The specification promotes continuous quality improvement through a responsive feedback system without benefit of a major revision or update.

**Local Purchase** Authorized purchase of materials, supplies, and services by a DoD organization from local commercial sources.

**Logistic Interoperability** A form of interoperability in which the service to be exchanged is assemblies, components, spares, or repair parts. Logistic interoperability will often be achieved by making such assemblies components, spares, or repair parts interchangeable, but can sometimes be a capability less than interchangeability when a degradation of performance or some limitations are operationally acceptable.

**Logistics** See Acquisition Logistics.

Logistics and Readiness Capabilities Parameters described in terms of mission requirements considering both wartime and peacetime logistics operations to include measures for mission capable rate, operational availability and frequency, and duration of preventive or scheduled maintenance actions. Also included are combat support requirements such as battle damage repair capability, mobility requirements, expected maintenance levels, and surge and mobilization objectives and capabilities.

**Logistics Funding Profile (LFP)** That portion of the program budget necessary to execute the acquisitions logistics plan.

**Logistics Management Information (LMI)** The documentation associated with supportability analysis (SA) efforts.

**Logistics Reliability** The measure of the ability of an item to operate without placing a demand on the logistics support structure for repair or adjustment. Logistics reliability recognizes the effects of occurrences that place a demand on the logistics support structure without regard to the effect on mission or function.

**Logistics Support** (**LS**) The application of a comprehensive, integrated approach to the supply, repair, and maintenance of items necessary for the proper operation of a system in the force.

**Logistics Supportability** The degree of ease to which system design characteristics and planned logistics resources (including the logistics support (LS) elements) allow for the meeting of system availability and wartime usage requirements.

**Logistic Support** (**LS**) **Elements** A traditional group of items, that taken together constitute logistics support. These include: maintenance planning; manpower and personnel; supply support; support equipment; technical data; training and training support; computer resources support; facilities; packaging, handling, storage, and transportation; and, design interface.

**Logistics Support, Supplies, and Services** These terms refer to any or all of the following—food, billeting, transportation, petroleum, oils, lubricants, clothing, communications services, medical services, ammunition, base operations support (and construction incident to base operations support), storage services, use of facilities, training services, spare parts and components, repair and maintenance services, and port services.

**Long-Lead Items/Long-Lead-time (LLT) Materials** Those components of a system or piece of equipment for which the times to design and fabricate are the longest, and therefore, to which an early commitment of funds may be desirable in order to meet the earliest possible data of system completion. Might be ordered during engineering management development (EMD) to arrive for production start.

**Long Range Investment Plans** Broad plans based on best estimates of future top-line fiscal resources which form the basis for making long range affordability assessments of acquisition programs.

**Lot** A specific quantity of material manufactured under identical conditions and assigned an identifying lot number for use, technical, manufacturing, production, and supply purposes.

Lot Acceptance This test is based on a sampling procedure to ensure that the product retains its quality. No acceptance or installation should be permitted until this test for the lot has been successfully completed.

Low-Rate Initial Production (LRIP) The minimum number of systems (other than ships and satellites) to provide production representative articles for operational test and evaluation (OT&E), to establish an initial production base, and to permit an orderly increase in the production rate sufficient to lead to full-rate production upon successful completion of operational testing. For major defense acquisition programs (MDAPs), LRIP quantities in excess of 10 percent of the acquisition objective must be reported in the selected acquisition report (SAR). For ships and satellites LRIP is the minimum quantity and rate that preserves mobilization.

# $\mathbf{M}$

**M-Day** The day on which mobilization is to begin.

**Machine Controlled Time** That part of a work cycle that is entirely controlled by a machine and, therefore is not influenced by the skill or effort of the worker.

**Machine Element** A work cycle subdivision that is distinct, describable, and measurable. The time is entirely controlled by a machine, and therefore, not influenced by the skill or effort of the worker.

**Maintainability** The ability of an item to be retained in, or restored to, a specified condition when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources, at each prescribed level of maintenance and repair. (See Mean Time To Repair (MTTR).)

**Maintenance** 1. The upkeep of property, necessitated by wear and tear, which neither adds to the permanent value of the property nor appreciably prolongs its intended life but keeps it in efficient operating condition. Normally includes "repair," but in Defense in the case of real property, is distinguished from repair by being limited to recurrent, day-to-day, periodic, or scheduled work required to preserve or restore a real-property facility to such condition that it may be effectively utilized for its designated purpose. 2. Preventive maintenance to deter something from going wrong; or corrective maintenance for restoration to proper condition.

**Maintenance Concept** A brief description of maintenance considerations, constraints, and plans for operational support of the system/equipment under development. A preliminary maintenance concept is developed and submitted as part of the preliminary system operational concept for each alternative solution candidate by the operating command with the assistance of the implementing and supporting commands. A major driver in designing the system/ equipment and the support planned.

**Maintenance Plan** A more detailed description of maintenance decisions on each repairable item candidate within the system Work Breakdown Structure (WMS). There are typically a family of maintenance plans covering each major subsystem, e.g., radar subsystem, hydraulic subsystem, etc. The maintenance plan is based on the level of repair analysis and is the basis for each of the traditional elements of logistic support (LS).

Maintenance Planning The process conducted to evolve and establish maintenance/support concepts and requirements for the life cycle of a materiel system. One of the traditional elements of logistic support (LS).

**Major Assembly** An operation in the construction of a section which joins a number of subassemblies.

Major Automated Information System (MAIS) Acquisition Program An AIS acquisition program that is designated by Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD(C³I)) as a MAIS, or estimated to require program costs in any single year in excess of 30 million in fiscal year (FY)96 constant dollars, total program costs in excess of 120 million in FY96 constant dollars, or total life cycle costs in excess of 360 million in FY96 constant dollars. MAISs do not include highly sensitive classified programs (as determined by the Secretary of Defense). For the purpose of determining whether an AIS is a MAIS, the following shall be aggregated and considered a single AIS: the separate AISs that constitute a multi-element program; the separate AISs that make up an evolutionary or incrementally developed program; or the separate AISs that make up an a multi-component AIS program.

**Major Defense Acquisition Program** (**MDAP**) An acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and that is designated by the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) as an MDAP, or estimated by the USD(A&T) to require an eventual total expenditure for research, development, test and evaluation (RDT&E) of more than 355 million in fiscal year (FY)96 constant dollars or, for procurement, of more than 2.135 billion in FY96 constant dollars.

**Major Force Program (MFP)** A MFP is an aggregation of program elements which reflects a macro-level force mission or a support mission of DoD and contains the resources necessary to achieve an objective or plan. It reflects fiscal time-phasing of mission objectives to be accomplished and the means proposed for their accomplishment.

The future years defense program (FYDP) is comprised of 11 (6 combat and 5 support oriented) major force programs:

Program 1 - Strategic Forces;

Program 2 - General Purpose Forces;

Program 3 - Intelligence and Communications;

Program 4 - Airlift and Sealift Forces;

Program 5 - Guard and Reserve Forces;

Program 6 - Research and Development;

Program 7 - Central Supply and Maintenance;

Program 8 - Training, Medical, and other General Personnel Activities;

Program 9 - Administration and Associated Activities;

Program 10 - Support of Other Nations; and

Program 11 - Special Operations Forces.

**Major Program** A term synonymous with major defense acquisition program (MDAP).

**Major System (DoD)** A combination of elements that shall function together to produce the capabilities required to fulfill a mission need, including hardware, equipment, software, or any combination thereof, but excluding construction or other improvements to real property. A system shall be considered a major system if it is estimated by the Under Secretary of Defense (Acquisition and Technology (USD(A&T)) to require an eventual total expenditure for research, development, test, and evaluation (RDT&E) of more than 135 million in FY96 constant dollars, or for procurement of more than 640 million in FY96 constant dollars.

**Make-or-Buy Program** That part of a contractor's written plan for the development or production of an end item which outlines the subsystems, major components, assemblies, subassemblies, and parts the contractor intends to manufacture, test-treat, or assemble (make); and those the contractor intends to purchase from others (buy).

**Management Control Objectives** The goals, conditions, or levels of control a manager establishes to provide reasonable assurance that resources are safeguarded against waste, fraud, and mismanagement. For Major Defense Acquisition Programs (MDAPs), basic control objectives involve the ability to adhere to a weapon system's cost, schedule, and performance baseline parameters.

**Management Control Techniques** Any form of organization, procedure, or document flow that are relied on to accomplish control objectives. For Major Defense Acquisition Programs (MDAPs), the milestone review information and periodic program status reports specified in DoD 5000.2-R provide adequate control techniques to achieve control objectives.

**Management Information System (MIS)** An orderly and disciplined accounting and reporting methodology, usually mechanized, which provides for the accurate recordation of data, and the timely extrapolation and transmission of management information used in the decision-making processes.

**Management Reserve** An amount of the total allocated budget withheld for management control purposes, rather than designated for the accomplishment of a specific task or set of tasks. It is not a part of the Performance Measurement Baseline. Synonymous with reserve.

**Man Hour/Month/Year** The effort equal to that of one person during one hour/month/year.

**Man-Machine Interface** Degree of compatibility between the user (individual) and the equipment being used. (See Soldier - Machine Interface (SMI).)

**Manpower** The total supply of persons available and fitted for service. Indexed by requirements including jobs lists, slots, or billets characterized by descriptions of the required people to fill them.

**Manpower and Personnel** The process of identifying and acquiring military and civilian personnel with the skills and grades required to operate and support a materiel system over its lifetime at peacetime and wartime rates. One of the traditional elements of logistic support (LS).

**Manpower Estimate** An estimate of the number of personnel required to operate, maintain, support, and train for the acquisition upon full operational deployment. Required for all acquisition category (ACAT) I programs.

**Manpower Scheduling and Loading** Effective and efficient utilization and scheduling of available manpower according to their skills to ensure required manufacturing operations are properly coordinated and executed.

**Manual Element** A distinct, describable, and measurable subdivision of a work cycle or operation performed by one or more human motions that are not controlled by process or machine.

**Manufacturing** The process of making an item by hand, or especially, by machinery, often on a large scale and with division of labor.

**Manufacturing Engineering** Preproduction planning and operation analysis applied to specific projects. Other similar functions include sustaining (ongoing) engineering, production engineering, and production planning.

Manufacturing Management Production/Capability Review A review accomplished by the program office during source selection to determine each competing contractor's existing and planned manufacturing management system and production capacity to meet all known production requirements of the proposed system considering all current firm and projected business.

**Manufacturing Technology (MANTECH)** Refers to any action which has as its objective: the timely establishment or improvement of the manufacturing processes, techniques, or equipment required to support current and projected programs, and the assurance of the availability to produce, reduce lead-time, ensure economic availability of end items, reduce costs, increase efficiency, improve reliability, or to enhance safety and anti-pollution measures.

**Market Investigation** A phase of market research conducted in response to a specific materiel need or need for services.

**Market Research** A process for gathering data on product characteristics, suppliers capabilities and the business practices that surround them, plus the analysis of that data to make acquisition decisions. Market research has two phases: market surveillance and market investigation.

**Market Surveillance** Includes all the activities that acquisition personnel perform continuously to keep themselves abreast of technology and product developments in their areas of expertise.

**Markup** Line-by-line review and approval/disapproval/modification of the defense budget by congressional committees.

**Material** Elements, constituents, or substances of which something is composed or can be made. It includes, but is not limited to, raw and processed material, parts, components, assemblies, fuels, and other items which may be worked into a more finished form in performance of a contract.

**Material Management** Direction and control of those aspects of logistics which deal with material, including the functions of identification, cataloging, standardization, requirements determination, procurement, inspection, quality control, packaging, storage, distribution, disposal, maintenance, mobilization planning, industrial readiness planning, and item management classification; encompasses materiel control, inventory control, inventory management, and supply management.

**Material Specification** This type of specification is applicable to raw material (chemical compound), mixtures (cleaning agents, paints), or semi-fabricated material (electrical cable, copper tubing) used in the fabrication of a product. Normally, a material specification applies to production but may be prepared to control the development of a material.

**Materiel** Equipment, apparatus, and supplies used by an organization or institution.

**Materiel Developer** A command or agency responsible for research and development (R&D) and production validation of an item. (Army)

**Materiel Fielding and Training** The action of checking out equipment functions and operator and maintenance personnel training after production and before turnover to users.

**Materiel Fielding Plan (MFP)** Plan to ensure smooth transition of system from developer to user. (Army)

**Materiel System** A final combination of subsystems, components, parts, and materials that makeup an entity for use in combat or in support thereof, either offensively of defensively, to destroy, injure, defeat, or threaten the enemy. It includes the basic materiel items and all related equipment, supporting facilities, and services required for operating and maintaining the system.

**Matrix Organization** Combines the advantages of the pure functional (traditional) structure and the product organizational structure. The program manager (PM) has total responsibility and accountability for program success. Functional managers provide

technical and business assistance to the PM from outside the program management office (PMO).

**Mean Time Between Failures (MTBF)** For a particular interval, the total functional life of a population of an item divided by the total number of failures within the population. The definition holds for time, rounds, miles, events, or other measures of life unit. A basic technical measure of reliability.

**Mean Time To Repair (MTTR)** The total elapsed time (clock hours) for corrective maintenance divided by the total number of corrective maintenance actions during a given period of time. A basic technical measure of maintainability.

**Measures of Effectiveness (MOE)** A measure of operational success that must be closely related to the objective of the mission or operation being evaluated. For example, the number of enemy submarines sunk or enemy tanks destroyed may be satisfactory MOEs if the objective is to destroy such weapons systems. However, if the real objective is to protect shipping or an infantry battalion, then the best course of action might be one which results in fewer friendly submarines or tanks actually killed. MOEs denoted in the Analysis of Alternatives (AoA), Operational Requirements Document (ORD) and Test and Evaluation Master Plan (TEMP) must be consistent. A meaningful MOE must be quantifiable and a measure to what degree the real objective is achieved.

**Measures of Performance (MOP)** Measures of a system's technical performance expressed as speed, payload, range, time on station, frequency, or other distinctly quantifiable performance features. Several MOPs may be related to the achievement of a particular MOE.

**Memorandum of Agreement (MOA)** 1. In contract administration, an agreement between a program manager (PM) and a contract administration office (CAO), establishing the scope of responsibility of the CAO with respect to the earned value management system criteria surveillance functions and objectives, and/or other contract administration functions on a specific contract or program. 2. Any written agreement in principle as to how program will be administered.

**Memorandum of Understanding (MOU)** Defacto agreements that are generally recognized by all partners as binding even if no legal claim could be based on the rights and obligations laid down in them.

**Methods Engineering** The technique that subjects each operation of a given piece of work to close analysis in order to eliminate every unnecessary element or operation and in order to approach the quickest and best method of performing each necessary element or operation. It includes the improvement and standardization of methods, equipment, and working conditions; operator training; the determination of standard times; and occasionally devising and administering various incentive plans.

**Methods Study** Systematic recording of all activities performed in a job or position of work including standard times for the work performed. Work simplification notes are written during the study.

**Micromanagement** The notion, perceived or real, of closely detailed scrutiny of a program's activities by one's superiors in the chain of command, or by the Congress. May result in second-guessing, reviews, changes, or further program justification. A usurpation of authority or responsibility.

**Midpoint Pricing** Uses a single set of rates that are the average of a pricing future time period in lieu of progressively escalated rates to develop an escalated price estimate.

**Midyear Review** 1. An update of President's original budget proposal by the Office of Management and Budget (OMB) and submitted to the Congress by 15 July. 2. An examination of specific portions of the budget by the comptroller at approximately the middle of a fiscal year (FY). Primary examination of operations and maintenance (O&M) appropriations. Also used to release or expedite funding.

**Milestone (MS)** The point when a recommendation is made and approval sought regarding starting or continuing (proceeding to next phase) an acquisition program. Milestones are: 0 (Approval to Conduct Concept Studies), I (Approval to Begin a New Acquisition Program), II (Approval to Enter Engineering & Manufacturing Development (EMD)), and III (Production or Fielding/Development and Operational Support (PF/DOS) approval.)

**Milestone Decision Authority** (**MDA**) The individual designated in accordance with criteria established by the Under Secretary of Defense (Acquisition and Technology) (USD(A&T)), or by the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD(C³I)) for automated information system (AIS) acquisition programs, to approve entry of an acquisition program into the next phase (DoD 5000.2-R).

**Military Assistance Program** The U.S. program for providing military assistance under the Foreign Assistance Act of 1961, as amended and by the Foreign Military Sales (FMS) Act of 1968.

**Military Operational Requirements** The formal expression of a military need, responses to which results in development or acquisition of item, equipment's, or systems. (See Operational Requirements Document (ORD).)

**Military Property** Government-owned property designed for military operations. It includes end items and integral components of military weapons systems, along with the related peculiar support equipment which is not readily available as a commercial item. It does not include government material, special test equipment, special tooling, or facilities.

**Military Utility** The military worth of a system performing its mission in a competitive environment including versatility (or potential) of the system. It is measured against the operational concept, operational effectiveness, safety, security, and cost/worth. Military utility estimates form a rational basis for making management decisions.

Minimum Acceptable Operational Performance Requirement (MAOPR) See Threshold

**Minimum Buy** The purchase of material in standard bulk quantities even though the contract requirement is less than the standard quantity. This is done when price does not increase proportionately for quantities less than the standard quantity.

**Mission** The objective or task, together with the purpose, which clearly indicates the action to be taken.

**Mission Area** A segment of the defense mission as established by the Secretary of Defense (SECDEF). Each DoD component has mission areas (e.g., Navy - antisubmarine warfare, Army - ground combat, etc.) for which it must equip its forces.

Mission Area Analysis (MAA) The process by which warfighting deficiencies are determined, technological opportunities for increased system effectiveness and/or cost reduction are assessed, and mission needs identified.

**Mission Critical Computer Resources** Computer resources whose function, operation or use involves intelligence activities, cryptologic activities related to national security, command and control of military forces, equipment which is an integral part of a weapon or weapon system, or is critical to direct fulfillment of military or intelligence missions.

**Mission Critical System** A system whose operational effectiveness and operational suitability are essential to successful completion or to aggregate residual combat capability. If this system fails, the mission likely will not be completed. Such a system can be an auxiliary or supporting system, as well as a primary mission system.

**Mission Element** A segment of a mission area critical to the accomplish of the mission area objectives and corresponding to a recommendation for a major system capability as determined by a DoD Component.

**Mission Equipment** Any item which is a functional part of a system or subsystem and is required to perform mission operations.

**Mission Need** A statement of operational capability required to perform an assigned mission or to correct a deficiency in existing capability to perform the mission.

**Mission Need Analysis** Assesses alternatives in an operational context, identifying what force capabilities would be gained (or foregone) by pursuing any of a designated set of

alternatives. Assesses the strengths and weaknesses of a military force when confronting a postulated threat in a specified scenario or set of circumstances (such as force structures, geographic location, and environmental conditions).

**Mission Need Determination (MND)** The process by which DoD Components determine deficiencies in current capabilities and opportunities to provide new capabilities in terms of nonmateriel solutions and/or materiel solutions. The process that leads to a Mission Need Statement (MNS).

Mission Need Statement (MNS) A nonsystem specific statement of operational capability need prepared in accordance with the Chairman, Joint Chiefs of Staff Instruction (CJCSI) 3170.01. Developed by DoD components and forwarded to the operational validation authority for validation and approval. Approved MNSs go to the milestone decision authority (MDA) for a determination on whether or not to convene a Milestone 0 review.

**Mission Reliability** The probability that a system will perform its required mission critical functions for a given period of time under conditions stated in the mission profile.

**Mobilization Base** The total of all resources available, or which can be made available, to meet foreseeable wartime needs.

**Mock Up** A model, built to scale, of a machine, apparatus, or weapon. It is used in examining the construction or critical clearances, in testing a new development, or in teaching personnel how to operate or maintain the actual machine, apparatus, or weapon.

**Model** A model is a representation of an actual or conceptual system that involves mathematics, logical expressions, or computer simulations that can be used to predict how the system might perform or survive under various conditions or in a range of hostile environments.

**Modification** A configuration change to a produced configuration item (CI). Any modification that is of sufficient cost and complexity that it could itself qualify as an acquisition category (ACAT) I or ACT IA program, must be considered a separate acquisition program.

**Module** An independently compilable software component made up of one or more procedures or routines or a combination of procedures and routines.

**Modular Contracting** A contracting approach under which the need for a system is satisfied in successive acquisitions of interoperable increments. Each increment complies with common or commercially acceptable standards applicable to information technology so that the increments are compatible with the other increments of information technology comprising the system.

Multiservice Test and Evaluation (T&E) T&E conducted by two or more DoD components for systems to be acquired by more than one DoD component, or for a DoD component's systems that have interfaces with equipment of another DoD component.

**Multiyear Procurement (MYP)** A method of competitively purchasing up to 5 years requirements in one contract which is funded annually as appropriations permit. If necessary to cancel the remaining quantities in any year, the contractor is paid an agreed upon portion of the unamortized nonrecurring start-up costs. Approved by the Congress.

## N

**National Disclosure Policy** Promulgates national policy and procedures in the form of specific disclosure criteria and limitations, definitions of terms, release arrangements, and other guidance required by U.S. departments and agencies having occasion to release classified U.S. information. In addition, it establishes and provides for the management of an interagency mechanism and procedures that are required for the effective implementation of the policy.

**National Military Strategy (NMS)** Joint Strategic Planning System (JSPS) document developed by the Joint Staff. Provides the advice of the Chairman, Joint Chiefs of Staff (CJCS), in consultation with the other members of the JCS and the Commanders-in-Chief (CINCs), to the President, the National Security Council (NSC), and the Secretary of Defense (SECDEF) on the national military strategy. It is designed to assist the SECDEF in preparation of the Defense Planning Guidance (DPG).

**National Security System (NSS)** Any telecommunications or information system operated by the United States Government, the function, operation, or use of which involves intelligence activities, cryptologic activities related to national security, command and control of military forces, equipment that is an integral part of a weapons system, or is critical to the direct fulfillment of military or intelligence missions. Such a system is not NSS if it is to be used for routine administrative and business applications (including payroll, finance, logistics and personnel management applications).

**Negligible Contamination Level** That level of nuclear, biological, and chemical contamination that would not produce militarily significant effects in previously unexposed and unprotected persons operating or maintaining the system.

**Negotiated Contract** One obtained by direct agreement with a contractor without sealed bids.

**Negotiated Contract Cost** The estimated cost negotiated in a cost-plus fixed fee (CPFF) contract, or the negotiated contract target cost in either a fixed-price-incentive contract or a cost-plus-incentive fee (CPIF) contract.

Negotiation Contracting through the use of either competitive or other-than-competitive proposals and discussions. Any contract awarded without using sealed bidding procedures is a negotiated contract.

**New Start** An item or effort appearing in the President's Budget for the first time; an item or effort that was previously funded in basic or applied research and is transitioned to advanced technology development or engineering development; or an item or effort transitioning into procurement appearing in the President's Budget for the first time in the investment area. Often confused with "program initiation" which is an acquisition term that describes the milestone decision that initiates an acquisition program.

**Nomenclature** Set or system of official names or titles given to items of material or equipment.

**Nonappropriated Funds** Monies derived from sources other than congressional appropriations, primarily from the sale of goods and services to DoD military and civilian personnel and their dependents and used to support or provide essential morale, welfare, recreational, and certain religious and education programs. Another distinguishing characteristic of these funds is that there is no accountability for them in the fiscal records of the United States Treasury.

**Nondevelopmental Item (NDI)** A nondevelopmental item is any previously developed item of supply used exclusively for government purposes by a Federal Agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement; any item described above that requires only minor modifications or modifications of the type customarily available in the commercial marketplace in order to meet the requirements of the processing department or agency.

**Nonmajor Defense Acquisition Program** A program other than a major defense acquisition program (MDAP) acquisition category (ACAT) I or a highly sensitive classified program: i.e., ACAT II, III and IV programs.

**Nonmateriel Solution** Solutions to mission needs (warfighting deficiencies) that can be satisfied by changes in doctrine, tactics, operational concepts, training, or organizations.

**Nonrecurring Costs** 1. Costs which are not proportional to the number of units produced. 2. A one-time cost that will occur on a periodic basis for the same organization. Nonrecurring costs include preliminary design effort, design engineering, and all partially completed reporting elements manufactured for tests. 3. Training of service instructor personnel.

**Nuclear, Biological, and Chemical Compatibility** The capability of a system to be operated, maintained, and resupplied by persons wearing a full complement of individual protective equipment, in all climates for which the system is designed, and for the period specified in the operational requirements document.

Nuclear, Biological, and Chemical Contamination (NBCC) The deposit and/or absorption of residual radioactive material or biological or chemical agents on or by structures, areas, personnel, or objects. Nuclear (N) contamination is residual radioactive material resulting from fallout or rainout, and residual radiation from a system produced by a nuclear explosion (e.g., nuclear indirect gamma activity (NIGA)), and persisting longer than one minute after burst. Biological (B) contamination is microorganisms and toxins that cause disease in man, plants, or animals or cause the deterioration of materiel. Chemical (C) contamination is chemical substances intended for use in military operations to kill, seriously injure, incapacitate, or temporarily irritate or disable man through their physiological effects.

**Nuclear, Biological, and Chemical Contamination Survivability** The capability of a system (and its crew) to withstand a nuclear, biological, and chemical contaminated (NBCC) environment and relevant decontamination without losing the ability to accomplish the assigned mission. An NBCC survivable system is hardened against NBCC and decontaminates; it can be decontaminated, and is compatible with individual protective equipment.

**Nuclear, Biological, and Chemical Decontamination** The process of making personnel and materiel safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it.

**Nuclear, Biological, and Chemical Hardness** The capability of materiel to withstand the materiel-damaging effects of nuclear, biological, and chemical contamination and relevant decontaminates.

**Nuclear Hardness** A quantitative description of the resistance of a system or component to malfunction (temporary and permanent) and/or degraded performance induced by a nuclear weapon environment. Measured by resistance to physical quantities such as overpressure, peak velocities, energy absorbed, and electrical stress. Hardness is achieved through adhering to appropriate design specifications and is verified by one or more test analysis techniques.

**Nuclear Survivability** The capability of a system to operate during and/or after exposure to a nuclear environment. Survivability may achieved by a number of methods, including proliferation, redundancy, avoidance, reconstitution, deception and hardening.

**Nuclear Survivability Characteristics** A quantitative description of the system features needed to meet its survivability requirements. Such system features include those design, performance, and operational capabilities used to limit or avoid the hostile environment, architectures that minimize the impact of localized damage to the larger wartime mission, as well as physical hardening to environment levels which cannot be mitigated otherwise.

**Numerical Control** Tape controlled machine operation which provides high repeatability for multiple process steps.

 $\mathbf{O}$ 

**Objective** The performance value that is desired by the user and which the program manager (PM) is attempting to obtain. The objective value represents an operationally meaningful, time critical, and cost effective increment above the performance threshold for each program parameter.

**Obligated Balance** The amount of budget authority (BA) committed for specific purposes but not actually spent.

**Obligation** A duty to make a future payment of money. The duty is incurred as soon as an order is placed, or a contract is awarded for the delivery of goods and the performance of services. The placement of an order is sufficient. An obligation "legally" encumbers a specified sum of money which will require outlay(s) or expenditures in the future.

**Obligation Authority** 1. A congressional authorization to procure goods and services within a specified amount by appropriation or other authorization. 2. The administrative extension of such authority, as by apportionment or funding. 3. The amount of authority so granted.

**Offer** A response to a solicitation that, if accepted, would bind the offeror to perform the resultant contract.

Office of the Secretary of Defense (OSD) Principal Staff Assistants (OSD PSAs) See Principal Staff Assistants.

**Offset Agreements** One of various industrial and commercial compensation practices required of defense contractors by foreign governments as a condition for the purchase of defense articles/services in either government-to-government or direct commercial sales. The responsibility for negotiating offset arrangements resides with the US firm involved.

**Off-the-Shelf** Procurement of existing systems or equipment without a research, development, test, and evaluation (RDT&E) program or with minor development to make system suitable for DoD needs. May be commercial system/equipment or one already in DoD inventory. (See Commercial Item and Nondevelopmental Item.)

One Year Appropriations Appropriations generally used for current administrative, maintenance, and operational programs, including the procurement of items classified as "expense." These appropriations are available for obligation for one fiscal year (FY).

**Open Standards** Widely accepted and supported standards set by recognized standards organizations or the market place. These standards support interoperability, portability, and scalability and are equally available to the general public at no cost or with a moderate license fee.

**Open System** A system that implements specifications maintained by an open, public consensus process for interfaces, services, and support formats, to enable properly engineered components to be utilized across a wide range of systems with minimal change, to interoperate with other components on local and remote systems, and to interact with users in a manner that facilitates portability.

Open Systems Acquisiton of Weapons Systems An integrated technical and business strategy that defines key interfaces for a system (or a piece of equipment under development) in accordance with those adopted by formal consensus bodies (recognized industry standards' bodies) as specifications and standards, or commonly accepted (de facto) standards (both company proprietary and non-proprietary) if they facilitate utilization of multiple suppliers.

**Open Systems Environment (OSE)** A comprehensive set of interfaces, services and supporting formats, plus aspects of interoperability of application, as specified by information technology standards and profiles. An OSE enables information systems to be developed, operated and maintained independent of application specific technical solutions or vendor products.

**Operating Budget (OB)** The annual budget of an activity stated in terms of Budget Classification Code, functional/subfunctional categories, and cost accounts. It contains estimates of the total value of resources required for the performance of the mission including reimbursable terms of total work units identified by cost accounts.

**Operating Costs** Those program costs necessary to operate and maintain the capability. These costs include military personnel (MP) and operations and maintenance (O&M) costs.

**Operating Time** The time during which the system is operating in a manner acceptable to the operator.

**Operation** 1. The assembly or disassembly of parts or objects. 2. The preparation of an object for another operation, transportation, inspection, or storage. 3. Military action using deployed forces.

**Operation Process Chart** Identifies the successive operations, in their required sequence, for producing a product (component).

**Operational Assessment (OA)** An evaluation of operational effectiveness and operational suitability made by an independent operational test activity, with user support as

required, on other than production systems. The focus of an OA is on significant trends noted in development efforts, programmatic voids, areas of risk, adequacy of requirements, and the ability of the program to support adequate operational testing (OT). OA may be made at any time using technology demonstrators, prototypes, mock-ups, engineering development models, or simulations but will not substitute for the independent operational test and evaluation (OT&E) necessary to support full production decisions.

**Operational Availability** The degree (expressed in terms of 1.0 or 100 percent as the highest) to which one can expect an equipment or weapon systems to work properly when it is required. The equation is uptime over uptime plus downtime, expressed as Ao. It is the quantitative link between readiness objectives and supportability.

**Operational Capability** The measure of the results of the mission, given the condition of the systems during the mission (dependability).

**Operational Constraints** Initially identified in the Mission Need Statement (MNS). As a minimum, these constraints will consider the expected threat and natural environments, the possible modes of transportation into and within expected areas of operation, the expected electronic warfare environment, the potential for NATO application, operational manning limitations, and existing infrastructure support capabilities.

**Operational Effectiveness** The overall degree of mission accomplishment of a system when used by representative personnel in the environment planned or expected (e.g., natural, electronic, threat, etc.) for operational employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat (including countermeasures, initial nuclear weapons effects, nuclear, biological, and chemical contamination (NBCC) threats).

**Operational Reliability and Maintainability (R&M)** Value Any measure of R&M that includes the combined effects of item design, quality, installation, environment, operation, maintenance, and repair.

**Operational Requirements** User-or user representative-generated validated needs developed to address mission area deficiencies, evolving threats, emerging technologies or weapon system cost improvements. Operational requirements form the foundation for weapon system unique specifications and contract requirements.

**Operational Requirements Document (ORD)** Documents the user's objective (desired) and threshold (minimum acceptable) level of requirements for operational performance of a proposed concept or system. Format is contained in Appendix II, DoD 5000.2-R.

**Operational Suitability (OS)** The degree to which a system can be placed satisfactorily in field use with consideration being given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors,

manpower supportability, logistic supportability, natural environmental effects and impacts, documentation, and training requirements.

**Operational System Development** A budget activity including research and development (R&D) efforts directed toward development, engineering, and test of systems, support programs, vehicles and weapons that have been approved for production and deployment.

**Operational Test and Evaluation (OT&E)** The field test, under realistic conditions, of any item (or key component) of weapons, equipment, or munitions for the purpose of determining the effectiveness and suitability of the weapons, equipment, or munitions for use in combat by typical military users; and the evaluation of the results of such tests.

**Operational Test Plan (OTP)** Documents specific operational test scenarios, objectives, measures of effectiveness (MOE), threat simulation, detailed resources, known test limitations and the methods for gathering, reducing, and analyzing data. Operational Transition Period begins with delivery of first production article and extends to program management responsibility transition.

**Operational Utility Evaluation** A U.S. Air Force document which helps acquisition decision makers ensure that marginal benefits, in terms of operational utility, are sound. Conducted during early system development by Air Force Operational Test and Evaluation Center (AFOTEC) to assess how well the system will meet user requirements.

**Operational Validation Authority** Designated authority responsible for confirming the user's identified need and the operational requirement. Will vary between the DoD components and by ACAT of the program.

**Operations and Support (O&S)** Cost Those resources required to operate and support a system, subsystem, or a major component during its useful life in the operational inventory.

**Operations Security** Protection of military operations and activities resulting from identification and subsequent elimination or control of indicators susceptible to hostile operations.

**Optimum Repair Level Analysis** A trade study conducted by a contractor as part of the system/equipment engineering analysis process. A basis on which to evolve an optimum approach to repair recommendations concurrent with the design and development process. Also referred to as Repair Level Analysis or Level of Repair Analysis (LOR/A).

**Option** A contractual clause permitting an increase in the quantity of supplies beyond that originally stipulated or an extension in the time for which services on a time basis may be required.

**Ordering Activity** An activity which originates a requisition or order for procurement, production, or performance of work or services by another activity.

**Organizational Level Maintenance** The maintenance and repair performed by the activity level (organization) which uses the system's equipment within the activity's capability.

**Original Budget** The budget established at, or near, the time the contract was signed, based on the negotiated contract cost.

**Other Plant** That part of plant equipment, regardless of dollar value, which is used in, or in conjunction with, the manufacture of components or end items relative to maintenance, supply, processing, assembly, or research and development (R&D) operations, but excluding items categorized as industry plant equipment.

**Outfitting** See Provisioning.

Outlays Actual Expenditures The disbursement of cash to liquidate a federal obligation.

**Out-of-Court Settlement** An out-of-court settlement resolves a major issue, which during program review presents an alternative to a proposal in the program objectives memorandum (POM). It is known as out-of-court because the issue was resolved outside the deliberation of the Defense Resources Board (DRB). The settlement reflects agreement reached through working-level negotiations between members of the services and the Office of the Secretary of Defense (OSD).

**Output** 1. In contracting, the desired results from the contractor. 2. In automated data processing (ADP), the result of what the computer is asked to do when activated.

**Output Standard** Specifies the number of items or amount of services that should be produced in a specific amount of time by a specific method.

**Out-Years** Normally, the years beyond the year being worked in the upcoming budget. If budget for fiscal year (FY)96-97 is being prepared, out-years are FY98 and beyond. Also used to refer to years beyond the current program objectives memorandum (POM), e.g., POM covers 96-01, out-years are 02 and beyond.

Overarching Integrated Product Team (OIPT) An integrated product team (IPT) led by the appropriate Office of the Secretary of Defense (OSD) director, and composed of the program manager (PM), program executive officer (PEO), component staff, user/user representative, and OSD staff involved in the oversight and review of a particular acquisition category (ACAT) ID program.

**Overhead** See Indirect Costs.

**Oversight** Review activity by OSD, DoD components and congressional committees of DoD programs to determine current status, ascertain if the law or other desires of the Congress are being followed, or as a basis for possible future legislation.

## P

**Packaging** The process and procedures used to protect material. It includes cleaning, drying, preserving, packaging, marking, and utilization.

**Packard Commission** The President's Blue Ribbon Commission on Defense Management, 1986. It made a number of significant recommendations on re-organizing the Joint Chiefs of Staff (JCS), the defense command structure, and the defense acquisition process. Many of these were enacted into law or instituted within DoD.

**Packing, Handling, Storage, and Transportation** The resources, processes, procedures, design considerations, and methods to ensure all system, equipment, and support items are preserved, packaged, handled, and transported properly. This includes environmental considerations, equipment preservation requirements for short-and long-term storage, and transportability. One of the traditional logistic support (LS) elements.

**Parameter** A determining factor or characteristic. Usually related to performance in developing a system.

**Parametric Cost Estimate** A cost estimating methodology using statistical relationships between historical costs and other program variables such as system physical or performance characteristics, contractor output measures, or manpower loading.

**Participating Service** A military Service that supports the lead service in the development of a joint acquisition program by its contribution of personnel and/or funds.

**Performance** Those operational and support characteristics of the system that allow it to effectively and efficiently perform its assigned mission over time. The support characteristics of the system include both supportability aspects of the design and the support elements necessary for system operation.

Performance Measurement Baseline (PMB) See BCWS.

**Performance Threshold** See Threshold

**PERT** See Program Evaluation Review Technique.

**PERT Chart** A graphic portrayal of milestones, activities, and their dependency upon other activities for completion and depiction of the critical path.

**Phases** See Acquisition Life Cycle.

**Physical Configuration Audit (PCA)** Physical examination to verify that the configuration item(s) (CIs) "as built" conform to the technical documentation which defines the item. Approval by the government program office of the CI product specification and satisfactory completion of this audit establishes the product baseline. May be conducted on first full production or first low rate initial production (LRIP) item.

**Piece** Part A single piece not normally subject to disassembly without destruction or impairment of use, such as resistors, transistors, relays, and gears.

Pilot Line and Tooling Costs 1. Costs associated with establishing an initial pilot line, necessary to acquire a limited number of representative items for test purposes, including the test items, will be funded by research, development, test, and evaluation (RDT&E). All items and costs beyond the quantity sufficient to test for operational acceptability will be financed by other appropriations. 2. When an item under development has also been approved for procurement, operational use, and included in the force structure, then hard tooling requirements common to both development and procurement phases will be funded by procurement appropriations. When an item under development has not been approved for procurement, operational use and included in the force structure, then tooling and other preliminary production facilities required to produce realistic development hardware for test and evaluation will be financed by RDT&E, even though such tooling might later be used for procurement if the item is subsequently approved for procurement, operational use and included in the force structure.

**Pilot Line Items** Production items manufactured to confirm production feasibility.

**Pilot Production** Production line normally established during engineering and management development (EMD) to test new manufacturing methods and procedures. Normally funded by research, development, test, and evaluation (RDT&E) until the line is proven.

Planning, Programming, and Budgeting System (PPBS) The primary resource allocation process of DoD. One of three major decision making support systems for defense acquisition. It is a formal, systematic structure for making decisions on policy, strategy, and the development of forces and capabilities to accomplish anticipated missions. PPBS is a cyclic process containing three distinct, but interrelated phases: planning, which produces Defense Planning Guidance (DPG); programming, which produces approved program objectives memorandum (POM) for the military departments and defense agencies; and budgeting, which produces the DoD portion of the President's national budget.

**Point of Contact (POC)** Person serving as coordinator, action officer, or focal point for an activity.

**Postdeployment Software Support (PDSS)** Those software support activities that occur after the deployment of the system.

**Postproduction Support (PPS)** Systems management and support activities necessary to ensure continued attainment of system readiness objectives with economical logistic support after cessation of production of the end item (weapon system or equipment).

**Postproduction Support Plan (PPSP)** A plan to ensure continued economical logistical support and systems management after cessation of production of the end item.

**Preaward Survey (Facility Capability Review)** Study of a prospective contractor's financial, organizational, and operational status made prior to contract award to determine their responsibility and eligibility for government procurement.

**Preliminary Design Review (PDR)** A review conducted on each configuration item to evaluate the progress, technical adequacy, and risk resolution of the selected design approach; to determine its compatibility with performance and engineering requirements of the development specification; and to establish the existence and compatibility of the physical and functional interfaces among the item and other items of equipment, facilities, computer programs, and personnel. Normally conducted during the early part of Engineering and Manufacturing Development (EMD) Phase II.

**Preplanned Product Improvement (P3I)** Planned future improvement of developmental systems for which design considerations are effected during development to enhance future application of projected technology. Includes improvements planned for ongoing systems that go beyond the current performance envelope to achieve a needed operational capability.

**Preproduction Prototype** An article in final form employing standard parts, representative of articles to be produced subsequently in a production line.

**Preproduction Qualification Test** The formal contractual tests that ensure design integrity over the specified operational and environmental range. These tests usually use prototype or preproduction hardware fabricated to the proposed production design specifications and drawings. Such tests include contractual reliability and maintainability (R&M) demonstrations tests required prior to production release.

**Preproposal Conference** In negotiated procurement, a meeting held with potential contractors a few days after Requests for Proposals (RFPs) have been sent out, to promote uniform interpretation of work statements and specifications by all prospective contractors.

**President's Budget (PB)** The federal government budget for a particular fiscal year transmitted no later than the first Monday in February to the Congress by the President in

accordance with the Budget Enforcement Act of 1992. Includes all agencies and activities of the executive, legislative, and judicial branches.

**Presolicitation Conference** A meeting held with potential contractors prior to a formal solicitation, to discuss technical and other problems connected with a proposed procurement. The conference is also used to elicit the interest of prospective contractors in pursuing the task.

**Preventive Maintenance** All actions performed in an attempt to retain an item in a specified condition by providing systematic inspection, detection, and prevention of incipient failures.

**Price Level Index** A factor used to convert constant dollar amounts from one year to another.

**Prime Contract** A contract agreement or purchase order entered into by a contractor with the government.

**Prime Contractor** The entity with whom an agent of the United States entered into a prime contract for the purposes of obtaining supplies, materials, equipment, or services of any kind.

**Principal Staff Assistants (PSAs)** For automated information systems (AIS), the PSAs represent the user community in the functional area under their direction on acquisition and requirements matters. The Office of the Secretary of Defense (OSD) PSAs are the Under Secretaries of Defense (USDs), the Director of Defense Research and Engineering (DDR&E), the Assistant Secretaries of Defense (ASDs), the Director, Operational Test and Evaluation (DOT&E), the General Counsel of the Department of Defense (GC, DoD), the Inspector General of the Department of Defense (DoDIG), the Assistants to the Secretary of Defense (ATSDs), and the OSD Directors or equivalents, who report directly to the Secretary or the Deputy Secretary of Defense.

**Privity** Relationship of having a contract.

**Probability of Kill (Pk)** The lethality of a weapon system. Generally refers to armaments. (e.g., missiles, ordnance, etc.). Usually the statistical probability that the weapon will detonate close enough to the target with enough effectiveness to disable the target.

**Process** 1. The combination of people, equipment, materials, methods, and environment that produce output--a given product or service. A process can involve any aspect of a business. 2. A key tool for managing processes is statistical process control, a planned series of actions of operations which advances a material or procedure from one stage of completion to another. 3. A planned and controlled treatment that subjects materials to

the influence of one or more types of energy for the time required to bring about the desired reactions or results.

**Process Layout** A method of plant layout in which the machines, equipment, and areas for performing the same or similar operations are grouped together, i.e., layout by function.

**Process Sheet** A document, originating in manufacturing engineering and sent to the production floor, which describes and illustrates methods and tools to be used in fabricating or assembling specific parts or subassemblies.

**Process Specification** This type of specification is applicable to a service which is performed on a product or material. Examples of processes are heat treatment, welding, plating, packing, microfilming, marking, etc. Process specifications cover manufacturing techniques which require a specific procedure in order that a satisfactory result may be achieved.

**Procurement** Act of buying goods and services for the government.

**Procurement Data Package** Includes documentation prepared expressly for the identification, description, and verification of items, materials, supplies, and services that are to be purchased, inspected, packaged, packed and supplied, or delivered to users.

**Procurement Executive** See Senior Procurement Executive (SPE).

**Procurement Lead-time** The interval in months between the initiation of procurement action and receipt into the supply system of the production model (excluded prototypes) purchased as the result of such actions, and is composed of two elements, production lead-time and administrative lead-time.

**Procurement (Local)** Procurement of materiel or services by an installation or its satellite activities or smaller stations. Such procurement overseas is by a military command for consumption within the command area. (Distinguished from central procurement.)

**Procurement Request (PR)** Document which describes the required supplies or services so that a procurement can be initiated. Some procuring activities actually refer to the document by this title, others use different titles such as Procurement Directive. Combined with specifications, the statement of work (SOW) and contract data requirements list (CDRL), it is called the PR Package, a basis for solicitation.

**Procuring Activity** Unless agency regulations specify otherwise, the term shall be synonymous with contracting activity.

**Procuring Contracting Officer (PCO)** The individual authorized to enter into contracts for supplies and services on behalf of the government by sealed bids or negotiations who is responsible for overall procurement of the contract.

**Producibility** The relative ease of manufacturing an item or system. This relative ease is governed by the characteristics and features of a design that enables economical fabrication, assembly, inspection, and testing using available manufacturing techniques.

**Producibility Engineering and Planning (PEP)** Applies to production engineering tasks to ensure a smooth transition from development into production. PEP, a systems and planning engineering approach, assures that an item can be produced in the required quantities and in the specified time frame, efficiently and economically, and will meet necessary performance objectives within its design and specification constraints. As an essential part of all engineering design, it is intended to identify potential manufacturing problems and suggest design and production changes or schedule trade-offs which would facilitate the production process.

**Producibility** Review A review of the design of a specific hardware item or system to determine the relative ease of producing it using available production technology considering the elements of fabrication, assembly, inspection, and test.

**Product** 1. The result of research, development, test, and evaluation (RDT&E) in terms of hardware or software being produced (manufactured). Also known as an end item. 2. The item stipulated in a contract to be delivered under the contract (i.e., service, study, hardware, etc.).

**Product Assurance Plan** Implements a product assurance program including reliability, availability, and maintenance (RAM), quality hardware and software, and system assessment to ensure user satisfaction, mission and operational effectiveness, and performance to specified requirements.

**Product Baseline** The initially approved documentation describing all of the necessary functional and physical characteristics of the configuration item (CI); any required joint and combined operations; the selected functional and physical characteristics designated for production acceptance testing; and tests necessary for deployment/installation, support, training, and disposal of the CI. This baseline is usually initiated at the Critical Design Review (CDR) and finalized at the Physical Configuration Audit (PCA), and normally includes product, process, and material specifications, engineering drawings, and other related data.

**Product Centers** Major subordinate organizations reporting to Air Force Materiel Command (AFMC): Aeronautical Systems Center (ASC), Electronics Systems Center (ESC), Space and Missile Systems Center (SMC), and Human Systems Center (HSC).

**Product Configuration Identification** The current approved technical documentation which defines the configuration of a configuration item during the production, operation,

maintenance, and support phases of its life cycle and which prescribes that necessary for: (1) form, fit and function characteristics of a CI, (2) the selected functional characteristics selected for production acceptance testing, and (3) the production acceptance tests.

**Product Improvement (PI)** Effort to incorporate a configuration change involving engineering and testing effort on end items and depot repairable components, or changes on other than developmental items to increase system or combat effectiveness or extend useful military life. Usually results from feedback from the users.

**Product Manager (PM)** Army PM, who is delegated authority and assigned responsibility for centralized management of a development or acquisition program that does not qualify for project management. Product manager positions are usually at the rank of Lieutenant Colonel or GS-14.

**Product Manufacturing Breakdown** Takes the product physical description and decomposes it into demands for specific types of manufacturing capability. This breakdown establishes the baseline for determination of the types of personnel and manufacturing facilities which will be required. It can also serve as the basis for establishing the time requirements for individual manufacturing operations involved in developing the required schedule relationships.

**Product Organization** An organizational structure centered on products, or components of a major system, with product managers reporting to a program manager (PM) or other central authority.

**Product Specification** Product specifications are applicable to any item below the system level, and may be oriented toward procurement of a product through specification of primarily function (performance) requirements or primarily fabrication (detailed design) requirements. Product specifications are intended to be used for procurement of items including computer programs.

**Production, Fielding/Deployment, and Operational Support (PF/DOS)** The fourth phase in the acquisition process following Milestone III. Operational and support systems are procured, items are manufactured, operational units are trained, and the systems are deployed.

**Production** The process of converting raw materials by fabrication into required material. It includes the functions of production-scheduling, inspection, quality control, and related processes.

**Production Acceptance Test and Evaluation (PAT&E)** Test and evaluation of production items to demonstrate that items procured fulfill requirements and specifications of the procuring contract or agreements.

**Production Article** The end item under initial or full rate production.

**Production Capacity Review** A review of a contractor's current availability and planned availability or production resources to determine the resources which could be committed to a proposed program and the expected facility utilization level.

**Production Center** The area containing the machine or machines operated by workers as well as the space required for storage of materials at the machine and for loading and unloading it.

**Production Control** The procedure of planning, routing, scheduling, dispatching, and expediting the flow of materials, parts, subassemblies, and assemblies within the plant from the state to the finished product in an orderly and efficient manner.

**Production Engineering** The application of design and analysis techniques to produce a specified product. Included are the functions of planning, specifying, and coordinating the application of required resources; performing analyses of producibility and production operations, processes, and systems; applying new manufacturing methods, tooling, and equipment; controlling the introduction of engineering changes; and employing cost control techniques.

**Production Equipment Maintenance** The task of inspecting, servicing, and adjusting the fabrication equipment to achieve minimum interruption of the manufacturing flow.

**Production Feasibility** The likelihood that a system design concept can be produced using existing production technology while simultaneously meeting quality, production rate, and cost requirements.

**Production Feasibility Review** A review of a system design concept to estimate the likelihood that the concept can be produced using existing production technology while simultaneously meeting quality, production rate, and cost requirements.

**Production Line Balancing** Balancing a production line means to plan its operation so that the rate of materials which flow through all work stations is as nearly uniform as practicable.

**Production Management** The effective use of resources to produce on-schedule the required number of end units that meet specified quality, performance, and cost. It includes but is not limited to industrial resource analysis, producibility assessment, producibility engineering, and planning, production engineering, industrial preparedness planning, postproduction planning, and productivity enhancement.

**Production Management Techniques** The technique utilized by the contractor to determine the progress of the production program.

**Production Plan** The document which describes the employment of the manufacturing resources to produce the required products or systems, on time, and within cost constraints.

**Production Plan Review** A review conducted to approve or disapprove a contractor prepared and submitted production plan.

**Production Planning** The broad range of activities initiated early in the acquisition process, and continued through a production decision, to ensure an orderly transition from development to cost-effective rate production or construction.

**Production Proveout** A technical test conducted prior to production testing with prototype hardware to determine the most appropriate design alternative. This testing may also provide data on safety, the achieveability of critical system technical characteristics, refinement and ruggedization of hardware configurations, and determination of technical risks.

**Production Qualification Test (PQT)** A technical test completed prior to the full rate production decision to ensure the effectiveness of the manufacturing process, equipment, and procedures. This testing also serves the purpose of providing data for the independent evaluation required for materiel release so that the evaluator can address the adequacy of the materiel with respect to the stated requirements. These test are conducted on a number of samples taken at random from the first production lot, and are repeated if the process or design is changed significantly, and when a second or alternative source is brought on line.

**Production Readiness** The state or condition or preparedness of a system to proceed into production. A system is ready for production when the producibility of the production design and the managerial and physical preparations necessary for initiating and sustaining a viable production effort have progressed to the point where a production commitment can be made without incurring unacceptable risks that will breach thresholds of schedule, performance, cost, or other established criteria.

**Production Readiness Review (PRR)** A formal examination of a program to determine if the design is ready for production, production engineering problems have been resolved, and the producer has accomplished adequate planning for the production phase. Normally performed as a series of reviews toward the end of engineering and management development (EMD).

**Production Representative/Production Configuration** System that can be used for engineering and management development (EMD) phase Initial Operational Test and Evaluation (IOT&E). A mature Engineering Development Model (EDM), or a Low Rate Initial Production (LRIP) system in its final configuration, conforming to production specifications and drawings. System level Critical Design Review (CDR), qualification testing, and Functional Configuration Audit (FCA) should have been completed. While

desirable, the item does not have to be manufactured using production tooling or processes.

**Production Schedules** Chronological controls used by management to regulate efficiently and economically the operational sequences of production.

**Productivity** The actual rate of output or production per unit of time worked.

**Productivity Enhancement** The use of contract incentives and other techniques to provide the environment motivation and management commitment to increase production efficiencies.

**Products** All items, material, data, software, supplies, systems, assemblies, subassemblies, or portions thereof produced, purchased, developed, or otherwise used by DoD.

**Profit** The excess amount realized from the sales of goods over the cost thereof in a given transaction or over a given period.

**Profit Center** A discrete, organizationally independent segment of a company, which has been charged by management with profit and loss responsibilities.

**Profit** (Excess) Profit over and above an established dollar or percentage limit.

**Program** 1. A DoD acquisition program. 2. As a verb, program means to schedule funds to meet requirements and plans. 3. A major, independent part of a software system. 4. A combination of program elements designed to express the accomplishment of a definite objective or plan.

**Program** (**Acquisition**) A defined effort funded by research, development, test, and evaluation (RDT&E) and/or procurement appropriations with the express objective of providing a new or improved capability in response to a stated mission need or deficiency.

**Program Acquisition Cost** The estimated cost of development research, development, test, and evaluation (RDT&E), procurement, and system specific military construction (MILCON) necessary to acquire the defense system. RDT&E costs are accumulated from the point in time when the DoD acquisition program is designated by title as a program element (PE) or major project within a PE. MILCON costs include only those projects that directly support and uniquely identify with the system.

**Program Acquisition Quantity** The total number of fully configured end items (to include research and development (R&D) units) a DoD component intends to buy through the life of the program, as approved by the Under Secretary of Defense (Acquisi-

tion and Technology) (USD(A&T)). This quantity may extend beyond the future years defense program (FYDP) years but shall be consistent with the current approved program.

**Program Acquisition Unit Cost (PAUC)** Computed by dividing the Program Acquisition Cost by the Program Acquisition Quantity. The PAUC and APUC are the subject of the Unit Cost Reports. Programs for which the current estimate of either the PAUC or APUC has increased by 15 percent or more over the currently approved APB must report a unit cost breach to the Congressional defense committees.

**Program Baseline** See Acquisition Program Baseline (APB).

**Program Budget Decision (PBD)** The Secretary of Defense (SECDEF) decision documents which affirm or change dollar amounts or manpower allowances in the services' budget estimate submissions (BES).

**Program Change Decision** A decision by the Secretary of Defense (SECDEF) issued in a prescribed format that authorizes changes in the structure of the future years defense program (FYDP).

**Program Change Request (PCR)** Prepared in a prescribed format, it is a proposal for out-of-cycle changes to data recorded in the approved future years defense program (FYDP).

**Program Cost** The total of all expenditures, in any appropriation and fund, directly related to the automated information system (AIS) definition, design, development, and deployment, and incurred from the beginning of the Concept Exploration (CE) phase through deployment at each separate site. For incremental and evolutionary program strategies, program cost includes all increments. Program cost does not include operations and support costs incurred at an individual site after operational cutover of any increment at that site, even though other sites may exist that have not yet completed deployment.

#### **Program Cost Categories**

Research, Development, Test, and Evaluation (RDT&E) appropriations fund the efforts performed by contractors and government activities, including procurement of end items, weapons, equipment, components, materials, and services required for development of equipment, material, computer application software, and its development and initial operational test and evaluation (OT&E). RDT&E also funds the operation of dedicated research and development (R&D) installations activities for the conduct of R&D programs.

<u>Procurement</u> appropriations fund those acquisition programs that have been approved for production (to include low rate initial production (LRIP) of acquisition objective quantities), and all costs integral and necessary to deliver a useful end item intended for operational use or inventory upon delivery.

Operations and Maintenance (O&M) appropriations fund expenses such as civilian salaries, travel, minor construction projects, operating military forces, training and education, depot maintenance, stock funds, and base operations support.

<u>Military Personnel (MP)</u> appropriations fund costs of salaries and other compensation for active and retired military personnel and reserve forces based on end strength.

<u>Military Construction (MILCON)</u> appropriations fund major projects such as bases, schools, missile storage facilities, maintenance facilities, medical/dental clinics, libraries, and military family housing.

Costs budgeted in the O&M and MP appropriations are considered **expenses**. Costs budgeted in the Procurement and MILCON appropriations are considered **investments**. Costs budgeted in the RDT&E and family housing appropriations include both expenses and investments.

**Program Cost Reporting** Reporting requirements prescribed in DoD Instructions which provide for comparable program costs and related data on research and development (R&D) activities and hardware items for use in program cost validation and progress and status analysis.

**Program Decision Meeting (PDM)** Navy or Marine Corps review forum to advise the Navy Acquisition Executive for decisions on acquisition programs at various levels.

**Program Decision Memorandum (PDM)** The Secretary of Defense's (SECDEF) approval of a military department or defense agency Program Objectives Memorandum (POM). Issued after Defense Resources Board (DRB) deliberations on the POM's.

**Program Definition and Risk Reduction (PDRR)** The second phase in the acquisition process, following Milestone I. Consists of steps necessary to verify preliminary design and engineering, build prototypes, accomplish necessary planning, and fully analyze trade-off proposals. The objective is to validate the choice of alternatives and to provide the basis for determining whether to proceed into engineering and manufacturing development (EMD).

**Program Deviation Reports** Reports baseline breaches to the Defense and Component Acquisition Executives (CAEs), and when appropriate to the Congress.

**Program Element (PE)** The 11 major force programs are subdivided into PEs. The PE is the basic building block of the future years defense program (FYDP). It is defined as "an integrated combination of men, equipment, and facilities which together constitute and identifiable military capability or support activity." It identifies the mission to be undertaken and the organizational entities to perform the mission. Elements may consist

of forces, manpower, materials, services, and/or associated costs as applicable. The PE consists of 7 digits ending with a letter indicating the appropriate service.

**Program Element Monitor (PEM)** Person within Headquarters (HQ) USAF office of primary responsibility who is directly responsible for a given program and all documentation needed to harmonize the program in the budget.

**Program Evaluation Review Technique (PERT)** A technique for management of a program through to completion by constructing a network model of integrated activities and events and periodically evaluating the time/cost implications of progressed.

**Program Executive Officer (PEO)** A senior military or civilian official who has responsibility for assigned ACAT I, ACAT IA, sensitive classified programs or other programs determined by the CAE. PEOs normally report directly to the CAE/CIO for assigned programs.

**Program Instability** The condition imposed on a program due to problems and/or changes in requirements, technology, and funding.

**Program Management** The process whereby a single leader exercises centralized authority and responsibility for planning, organizing, staffing, controlling, and leading the combined efforts of participating/assigned civilian and military personnel and organizations, for the management of a specific defense acquisition program or programs, throughout the system life cycle.

**Program Management Directive (PMD)** The official Headquarters (HQ) U.S. Air Force document used to direct acquisition responsibilities to the appropriate Air Force major commands, agencies, program executive offices (PEOs), or designated acquisition commander. All Air Force acquisition programs require PMDs.

**Program Management Plan (PMP)** The document developed and issued by an Air Force program manager (PM) which shows the integrated time-phased actions and resources required to complete the task.

**Program Manager** (**PM**) A military or civilian official who is responsible for managing, through integrated product teams (IPTs), an acquisition program.

**Program Manager Charter** See Charter (Program Manager's).

**Program Objectives Memorandum (POM)** An annual memorandum in prescribed format submitted to the Secretary of Defense (SECDEF) by the DoD component heads which recommends the total resource requirements and programs within the parameters of SECDEF's fiscal guidance. A major document in the planning, programming, and budgeting system (PPBS); is POM is the basis for the component budget estimates. The POM is the principal programming document which details how a component proposes to

respond to assignments in the defense planning guidance (DPG) and satisfy its assigned functions of the future years defense program (FYDP). The POM shows programmed needs for 5 or 6 years hence (i.e., in fiscal year (FY) 94, POM 1996-2001 was submitted; in FY 95, POM 1997-2001 was submitted), and includes manpower, force levels, procurement, facilities, and research and development (R&D).

**Program Office Estimate (POE)** A detailed estimate of acquisition and ownership costs normally required for high level decisions. The estimate is performed early in the program and serves as the basepoint for all subsequent tracking and auditing purposes.

**Program Protection** The safeguarding of defense systems and technical data anywhere in the acquisition process to include the technologies being developed, the support systems (e.g., test and simulation equipment), and research data with military applications.

**Programmatic** Pertains to the cost, schedule and performance characteristics of an acquisition program.

**Programming** 1. The projection of activities to be accomplished and the resources that will be required for specified periods in the future, normally six years. 2. The process of estimating and requesting resources for a program, especially in terms of quantitative requirements for funding manpower, materiel, and facilities for program office operations and for design, development and production of a defense system.

**Program Stability** A stable program is experiencing few, if any, perturbations in cost, schedule, performance, support, and other associated business or technical problems.

**Program Work Breakdown Structure (WBS)** The WBS structure that encompasses an entire program. It consists of at least three levels of the program with associated definitions and is used by the government program manager and contractor to develop and extend a Contract Work Breakdown Structure. Examples of WBSs for various items of defense materiel which may be used as a guide for acquisition programs are contained in MIL-HDBK 881.

**Progress Payments** Payments made to a prime contractor during the life of a fixed-price type contract on the basis of a percentage of incurred total costs or total direct labor and material costs.

**Project** 1. Synonymous with program in general usage. 2. Specifically, a planned undertaking having a finite beginning and ending, involving definition, development, production, and logistics support of a major weapon or weapon support system or systems. A project may be the whole or a part of a program.

**Project Definition** The process of exploring more thoroughly all aspects of the proposed projects and to examine the relations between required performance, development time, and cost. The areas of technical uncertainty are examined and possible trade-offs are

evolved in order to achieve a satisfactory balance between performance, development time, and cost.

**Project Manager** See Program Manager (PM).

**Proprietary Right** A broad contractor term used to describe data belonging to the contractor. These data could be intellectual property, financial data, etc. This is generally a term used in the submission of a proposal to protect the contractor's sensitive information from disclosure and is not a category of rights applicable to technical data under all contracts.

**Protest** A concern over the award of a contract, submitted to Government Accounting Office (GAO) or Procuring Contracting Office (PCO).

**Prototype** An original or model on which a later system/item is formed or based. Early prototypes may be built during program definition and risk reduction (PDRR) phase and tested prior to milestone (MS) II decision. Selected prototyping may continue in phase II, Engineering and Manufacturing Development (EMD), as required to identify and resolve specific design and manufacturing risks early in the phase or in support of preplanned product improvement (P3I) or evolutionary acquisition (EA).

**Provisioning** The process of determining and acquiring the range and quantity (depth) of spares and repair parts, and support and test equipment required to operate and maintain an end item of material for an initial period of service. Usually refers to first outfitting of a ship, unit, or system.

**Purchase Order** A contractual procurement document used primarily to procure supplies and nonpersonal services when the aggregate amount involved in any one transaction is relatively small (e.g., not exceeding \$25,000).

# O

**Qualification Test** Simulates defined operational environmental conditions with a predetermined safety factor, the results indicating whether a given design can perform its function within the simulated operational environment of a system.

**Qualified Products List (QPL)** A list of products which are pretested in advance of actual procurement to determine which suppliers can comply properly with specification requirements. This is usually done because of the length of time required for test and evaluation (T&E).

Qualitative and Quantitative Personnel Requirements Information (QQPRI) Organizational, doctrinal, training, duty position and personnel information used to develop the Basis of Issue Plan (BOIP). (Army)

**Quality** The composite of material attributes including performance features and characteristics of a production or service to satisfy a customer's given need.

**Quality Assurance (QA)** A planned and systematic pattern of all actions necessary to provide confidence that adequate technical requirements are established, that products and services conform to established technical requirements, and that satisfactory performance is achieved.

**Quality Audit** A systematic examination of the acts and decisions with respects to quality in order to independently verify or evaluate the operational requirements of the quality program or the specification or contract requirements for a product or service.

**Quality Control (QC)** The system or procedure used to check product quality throughout the acquisition process.

**Quality Function Deployment (QFD)** A graphical technique that shows the relationships between system requirements and proposed design solutions. This technique identifies tradeoffs, shows where design solutions may conflict and/or where proposed solutions will not meet requirements.

**Quality of Conformance** The effectiveness of the design and manufacturing functions in executing the product manufacturing requirements and process specifications while meeting tolerances, process control limits, and target yields for a given product group.

**Quality of Design** The effectiveness of the design process in capturing the operational requirements and translating them into detailed design requirements that can be manufactured (or coded) in a consistent manner.

**Quality Program** A program which is developed, planned, and managed to carry out, cost-effectively, all efforts to effect the quality of material and services from concept through validation, full-scale development, production, deployment, and disposal.

## R

**Ramp Up** Usually refers to low rate initial production (LRIP) with small number of quantities gradually increasing as production line is proven and additional procurement dollars obtained.

**Rate Cost** A mathematical way of explaining and measuring the impact of changing production rates on a program's total cost.

**Rating Factor** That percentage of skill, effort, and method displayed by an operator during the period of the study with 100 percent representing normal skill and effort.

**Raw Materials** Includes raw and processed material in a form or state that required further processing.

**Readiness** State of preparedness of forces or weapon system or systems to meet a mission or to warfight. Based on adequate and trained personnel, material condition, supplies/reserves of support system and ammunition, numbers of units available, etc.

**Readiness Drivers** Those system characteristics which have the largest effect on operational characteristics.

**Ready for Training** The first attainment of the sustained capability to train military units adequately to operate and maintain a weapon system effectively for operational capability.

**Realistic Test Environment** The conditions under which the system is expected to be operated and maintained, including the natural weather and climatic conditions, terrain effects, battlefield disturbances, and enemy threat conditions.

**Realization Factor** The ratio of actual performance time to standard performance time, usually expressed as a decimal number.

**Real Time** 1. Software—essence of real time is the synchronism of processes with the outside world. 2. An immediate response to an outside stimulus.

**Reapportionment** A revision by the Office of Management and Budget (OMB) of a previous apportionment of budgetary resources for an appropriation or fund account. A revision would ordinarily cover the same period, projects, or activity covered in the original apportionment.

**Reasonable Price** A business decision reached jointly by a buyer and seller, a product of judgment influenced by bargaining strength and economic realities dictated by the marketplace.

**Reclama** A formal appeal to the service comptroller or the Secretary of Defense's (SECDEF) tentative budget decision on the service budget estimates.

**Reconciliation** Directives to standing committees contained in congressional budget resolutions calling for certain dollar savings and a deadline for reporting legislation to achieve the savings. Omnibus reconciliation bill incorporating these changes is introduced and acted on in both Houses.

**Reconstitution** Involves forming, training, and fielding new fighting units. This includes initially drawing on cadre-type units and laid-up military assets; mobilizing previously trained or new manpower; and activating the industrial base on a large scale. Reconstitution also involves maintaining technology, doctrine, training, experienced military

personnel, and innovation necessary to retain the competitive edge in decisive areas of potential military competition.

**Recurring Effort** An effort repeated during a contract's duration.

**Redundancy** Repetition of parts or subsystems to assure operation if original (primary) part or subsystem fails.

**Reimbursable** An expenditure made for another agency, fund, or appropriation, or for a private individual, firm or corporation, which subsequently will be recovered.

**Reimbursements** Amounts received by an activity for the cost of material, work, or services furnished to others, for credit to an appropriation or other fund account. **Reliability** The ability of a system and its parts to perform its mission without failure, degradation, or demand on the support system. (See Mean Time Between Failures (MTBF).)

**Reliability and Maintenance (R&M) Accounting** That set of mathematical tasks which establish and allocate quantitative R&M requirements, and predict and measure quantitative R&M achievements.

**Reliability and Maintenance (R&M) Engineering** That set of design, development, and manufacturing tasks by which R&M are achieved.

**Reliability Based Logistics (RBL)** Emphasizes the importance of designing reliability into systems and is an expansion of the process used to determine the support concept for a system, subsystem, and/or component. RBL addresses decisions such as consumable versus repairable, commercial versus organic repair, warranties, technology insertion, and form-fit-function interface (F3I) specifications as methods for facilitating reliable designs.

Reliability, Availability, and Maintainability (RAM) Requirement imposed on acquisition systems to insure they are operationally ready for use when needed, will successfully perform assigned functions, and can be economically operated and maintained within the scope of logistics concepts and policies. RAM programs are applicable to materiel systems; test measurement and diagnostic equipment, training devices; and facilities developed, produced, maintained, procured, or modified for use. (See individual definitions for Reliability, Availability, and Maintainability.)

**Repair** The restoration or replacement of parts or components of real property or equipment as necessitated by wear and tear, damage, failure of parts or the like, in order to maintain it in efficient operating condition.

**Repair Parts** Consumable bits and pieces, that is, individual parts or nonreparable assemblies, required for the repair of spare parts or major end items.

**Repairability** The probability that a failed system will be restored to operable condition within a specified active repair time.

**Repairable Item** An item of a durable nature which has been determined by the application of engineering, economic, and other factors to be the type of item feasible for restoration to a serviceable condition through regular repair procedures.

**Replanning** See Internal Replanning.

**Replenishment** The purchase of additional items following initial purchase, whether bought for support of additional end items, routine restockage, or other purposes. **Replenishment Spare Parts** Items and equipment, both repairable and consumable, purchased by inventory control points, required to replenish stocks for use in the maintenance, overhaul, and repair of equipment, such as ships, tanks, guns, aircraft, engines, etc.

**Reprogramming** The transfer of funds between program element or line items within an appropriation for purposes other than those contemplated at the time of appropriation. Reprogramming is generally accomplished pursuant to consultation with, and approval by, appropriate congressional committees, if above thresholds prescribed for different appropriations, i.e. procurement, military construction (MILCON), operations and maintenance (O&M), military personnel (MP) and research, development, test, and evaluation (RDT&E).

**Request for Proposal (RFP)** A solicitation used in negotiated acquisition to communicate government requirements to prospective contractor and to solicit proposals.

**Request for Quotation (RFQ)** A solicitation used in negotiated acquisition to communicate government requirements to prospective contractors and to solicit a quotation. A response to an RFQ is not an offer, however, it is informational in character.

**Request for Technical Proposal** Solicitation document used in two-step sealed bid. Normally in letter form, it asks only for technical information—price and cost breakdowns are forbidden.

**Required Operational Characteristics** System parameters that are primary indicators of the system's capability to be employed to perform the required mission functions, and to be supported.

**Required Technical Characteristics** System parameters selected as primary indicators of achievement of engineering goals. These need not be direct measures of, but should always relate to the system's capability to perform the required mission functions, and to be supported.

**Requirement** 1. The need or demand for personnel, equipment, facilities, other resources, or services, by specified quantities for specific periods of time or at a specified

time. 2. For use in budgeting, item requirements should be screened as to individual priority and approved in the light of total available budget resources.

**Requirements Creep** The tendency of the user (or developer) to add to the original mission responsibilities and/or performance requirements for a system while it is still in development.

**Requirements Scrub** 1. A review of user/government comments received in response to the announcement of an operational requirement. The scrub is used to validate and prioritize suggested or requested system functions and capabilities before release to industry. 2. Review of a draft requirements document, such as an ORD, by the acquisition and user communities to determine adequacy and clarity of performance specified in the document.

**Requirements Validation Authority** See Operational Validation Authority.

**Research and Development (R&D) Costs** Those program costs primarily associated with R&D efforts including the development of a new or improved capability to the point where it is appropriate for operational use. These costs are funded under Research, Development, Test, and Evaluation (RDT&E) appropriation.

**Research** (**Basic**) Scientific study and experimentation directed towards increasing knowledge and understanding in fields directly related to explicitly stated long-term national security needs. The DoD Basic Research Plan targets the following areas for research: biological and medical sciences, atmospheric and space sciences, chemistry, cognitive and neural sciences, computer sciences, electronics, materials science, mathematics, mechanics, ocean sciences, physics, and terrestrial sciences.

Research, Development, Test, and Evaluation (RDT&E) 1. Activities for the development of a new system that include basic and applied research, advanced technology development, demonstration and validation (DEM/VAL), engineering development, developmental and operational testing and the evaluation of test results. Includes activities to expand the performance of fielded systems. 2. An appropriation consisting of budget activities for basic research, applied research, advanced technology development, demonstration and validation, engineering and manufacturing development, RDT&E management and support and operational systems development.

**Research, Development, Test, and Evaluation (RDT&E) Activities** Consists of all efforts funded from the RDT&E appropriation.

**Rescission** An action by the President canceling budget authority previously appropriated but not yet obligated or spent. If both Houses of Congress do not approve the proposed rescission within 45 days, the President must obligate the budget authority (BA) as intended by the Congress.

**Rescission Bill** A bill or joint resolution that provides for cancellation, in full or in part, of budgetary resources previously granted by the Congress. Under Section 1012 of the Impoundment Control Act of 1974, unless the Congress approves a rescission bill within 45 days of continuous session after receipt of the proposal, the budgetary resources must be made available for obligation.

**Residual Value** The scrap value of equipment at the end of the economic life system.

**Resource Allocation Process** (RAP) Includes the planning, programming, and budgeting system (PPBS), the Congressional budget enactment process, the apportionment of appropriated funds and budget execution.

**Resource Leveling** A process whereby resources are sorted out among tasks and activities to identify and avoid conflicts between scheduling and availability.

**Resource Manager** The head of a staff element responsible for the management of a specified appropriation or its subdivision, revolving fund, or for the management of the overall manpower authorization. May bear the title "comptroller," "appropriation," "budget program," or "budget activity," manager.

**Retrofit** (**Retroactive Fit**) A modification of a configuration item to incorporate changes made in later production items. (See Backfitting)

**Review** The discrete process of gathering and evaluating information to make a decision about a program. Examples are milestone reviews and other program decision reviews.

Revolution in Business Affairs (RBA) An effort to reengineer the Department of Defense's business practices, shrink the department's supporting infrastructure and make the remaining infrastructure significantly more efficient. It includes not only reducing overhead and streamlining infrastructure but also taking maximum advantage of acquisition reform, outsourcing and privatizing a wide range of support activities when the necessary competitive conditions exist, leveraging commercial technology, dual-use technology and open systems, reducing unneeded specifications and standards, utilizing integrated product and process development and increasing cooperative programs with allies.

**Revolution in Military Affairs (RMA)** Dramatic changes in the art of warfare precipitated by rapid technological advances. Exploiting the RMA means not only acquiring new systems based on advanced technology but also developing the concepts, doctrine and organizations to fully utilize the new technologies in a way to dominate the battle-field.

**Revolving Fund** A fund established to finance a cycle of operations through amounts received by the fund. Within the DoD, such funds include stock funds and industrial funds, as well as other working capital funds.

**Rework** Any corrections of defective work—either before, during, or after inspection.

**Rights in Technical Data (TD)** The right for the government to acquire technical data. If the government has funded or will fund a part of or the entire development of the item, component or process, then the government is entitled to unlimited rights in the TD. However, if the above is developed by a contractor or subcontractor exclusively at private expense, the government is entitled to limited rights. Such data must be unpublished and identified as limited rights data. (See Limited Rights, Government Purpose License Rights, and Unlimited Rights.)

**Risk** A measure of the inability to achieve program objectives within defined cost and schedule constraints. Risk is associated with all aspects of the program, e.g., threat, technology, design processes, Work breakdown structure (WBS) elements, etc. It has two components, the probability of failing to achieve a particular outcome, and the consequences of failing to achieve that outcome.

**Risk Analysis** A detailed examination of each identified program risk which refines the description of the risk, isolates the cause, and determines the impact of the program risk in terms of its probability of occurrence, its consequences, and its relationship to other risk areas or processes.

**Risk Areas** The program areas which are the primary sources of program risk. Risk areas include, but are not necessarily limited to, threat and requirements, technology, design and engineering, manufacturing, support, cost, and schedule.

**Risk Assessment** The process of identifying program risks within risk areas and critical technical processes, analyzing them for their consequences and probabilities of occurrence, and prioritizing them for handling.

**Risk Assumption** A risk handling option in which selected program risks are accepted and monitored by the management team.

**Risk Avoidance** A risk handling option which eliminates risk by eliminating or modifying the concept, requirements, specifications, or practices that create the unacceptable risk.

**Risk Control** A risk handling option which monitors a known risk and then takes specific actions to minimize the likelihood of the risk occurring and/or reduce the severity of the consequences.

**Risk Documentation** The recording, maintaining, and reporting of all risk assessment results, risk handling analysis, and risk monitoring results.

**Risk Handling** A process that identifies, evaluates, selects, and implements risk handling options that reduce risk to acceptable levels with the best cost-benefit ratio.

**Risk Identification** A process to examine each program area and critical technical process to identify the associated risks.

**Risk Management** All plans and actions taken to identify, assess, mitigate, and continuously track, control, and document program risks.

**Risk Management Plan** A document which records the results of the risk planning process.

**Risk Monitoring** A process that systematically tracks and evaluates the performance of risk items against established metrics throughout the acquisition process and develops further risk reduction handling options as appropriate.

**Risk Planning** The process of developing an organized, comprehensive, and iterative approach to identifying, assessing, mitigating, and continuously tracking, controlling, and documenting risk which are tailored for each program and compatible with the DoD acquisition management.

**Risk Rating Scheme** A logical, controlled, documented, and verifiable method of assigning risk levels to a system, system element, or critical acquisition process which is based on the probability of occurrence and the consequence of failing to achieve the desired outcome.

**Risk Transfer** 1. A risk handling option which reallocates system requirements or design specifications between different system elements in order to reduce overall system risk, system element risk, or process risk; 2. A risk handling option which shares selected program risks between the government and the prime system contractors by means of various contractual arrangements; 3. A risk handling option which shares select program risks between government agencies involved in the acquisition process by means of memorandums of understanding or similar agreements.

**Robust Design** The design of a system such that its performance is insensitive to variations in manufacturing tolerances, or its operational environment (including maintenance, transportation, and storage), or to component drift due to aging.

**Rollaway Costs** See Flyaway Costs.

S

Sailaway Costs See Flyaway Costs.

**Schedule** Series of things to be done in sequence of events within given period; a timetable.

**Schedule Risk** The risk that a program will not meet its acquisition strategy schedule objectives or major milestones established by the acquisition authority. **Schedule Variance (SV)** The difference between the BCWP and the BCWS (SV = BCWP – BCWS).

**Scheduling** The prescribing of when and where each operation necessary to the manufacture of a product is to be performed.

**Science and Technology (S&T) Program** Consists of projects in basic research, applied research, and advanced technology development.

**Sealed Bidding** This term replaces formal advertising. (See Two-Step Sealed Bids.)

**Second Source** Execution of established acquisition strategy to qualify two producers for the part or system. Sometimes called dual sourcing.

**Security Assistance** Material and services provided by the U.S. to eligible allies as specified by the Congress. This broad term includes the Military Assistance Program authorized by the Foreign Assistance Act of 1961, as amended, and the Foreign Military Sales Program authorized by the Foreign Assistance Act of 1961.

**Segment** A grouping of elements that are closely related and often physically interface. It consists of configuration items (CIs) produced by several contractors and integrated by one.

**Selected Acquisition Reports (SAR)** Standard, comprehensive, summary status reports on major defense acquisition programs (MDAPs) (acquisition category (ACAT) I) required for periodic submission to the Congress. They include key cost, schedule, and technical information.

Senior Procurement Executive (SPE) The senior official responsible for management direction of the Service procurement system, including implementation of unique procurement policies, regulations, and standards (see Title 41 U.S.C. §414, "Executive Agency Responsibilities"). The SPE for all non-Service DoD Components is the Under Secretary of Defense for Acquisition and Technology (USD(A&T)) (see Title 10 U.S.C. §133, "Under Secretary of Defense for Acquisition and Technology").

**Serviceability** A measure of the degree to which servicing of an item will be accomplished within a given time under specified conditions.

**Service Acquisition Executive (SAE)** See DoD Component Acquisition Executive (CAE).

**Service Contract** One which calls directly for a contractor's time and effort rather than for a concrete end product.

**Service Life** Quantifies the average or mean life of the item. There is no general formula for the computation. Often refers to the mean life between overhauls, the mandatory replacement time, or the total usefulness of the item in respect to the weapon it supports; that is, from first inception of the weapon until final phaseout.

**Service Life Extension Program (SLEP)** Modification(s) to fielded systems undertaken to extend the life of the system beyond what was previously planned.

**Service Supplement** Information, instructions, or lists of items of supply applicable only to one military service.

(Service) System Acquisition Review Council (SARC) A council established by the head of a military department as an advisory body on defense system acquisitions. The (S)SARC is normally chaired by the Acquisition Executive and is similar in functional composition, responsibilities and operation to the Defense Acquisition Board (DAB). In application, the term (Service) is replaced by the designation of the applicable military department, e.g., U.S. Army System Acquisition Review Council (ASARC). (See Program Decision Meeting (PDM).)

**Setup** Making ready or preparing for the performance of a job operation. It included the tear down to return the machine or work area it its original or normal condition.

**Setup Time** The time required to arrange locating fixtures and equipment in order to begin productive work, including adjustments and takedown of the original setup.

**Shelf Life** The expected length of time in inventory (use) for a system, component, or subassembly.

**Should-Cost Estimate** An estimate of contract price which reflects reasonably achievable contractor economy and efficiency. It is accomplished by a government team of procurement, contract administration, audit and engineering representatives performing an in-depth cost analysis at the contractor's and subcontractor's plants. It's purpose is to develop a realistic price objective for negotiation purposes.

**Show Stopper** An event or condition serious enough to halt or severely perturbate a program unless confronted and eliminated.

**Sign Up To** Agree to, authorize, or permit to proceed on a proposal, document or program. (See Chop.)

**Simulation** A simulation is a method for implementing a model. It is the process of conducting experiments with a model for the purpose of understanding the behavior of the system modeled under selected conditions or of evaluating various strategies for the operation of the system within the limits imposed by developmental or operational criteria. Simulation may include the use of analog or digital devices, laboratory models, or "testbed" sites. Simulations are usually programmed for solution on a computer; however, in the broadest sense, military exercises, and wargames are also simulations.

**Simulation Based Acquisition (SBA)** A concept which envisions greater and more integrated use of modeling and simulation in the acquisition process. DoD and industry would be enabled by robust, collaborative use of simulation technology that is integrated across acquisition programs and phases.

**Simulator** A generic term used to describe equipment used to represent weapon systems in development testing, operational testing, and training, e.g., a threat simulator has one or more characteristics which, when detected by human senses or man-made sensors, provide the appearance of an actual threat weapon system with a prescribed degree of fidelity.

**Single Process Initiative (SPI)** The process for making block changes to existing contracts to replace multiple government-unique manufacturing and management systems with common facility-wide systems so as to unify the manufacturing and management requirements of these contracts on a facility-wide basis.

**Skunkworks** A separate program management operation established to operate outside the normal process, either to expedite development or because of high security classification.

Small and Disadvantaged Business Utilization (SADBU) Program A program which embraces prime contracts, set-aside contracts, subcontracting, small disadvantaged business, women-owned small business, procurement technical assistance program, American Indian Program, National Industries for the Blind, National Industries for the Severely Handicapped, Puerto Rico Initiative, outreach programs and the Small Business Innovation Research Program.

**Small Purchase** A purchase for no more than \$100,000.

"Smart" Munitions Munitions which "think for themselves" and have self-contained ability to search, detect, acquire, and engage targets. They will be delivered to target areas by guns, rockets, missiles, or aircraft with the carriers (platforms) delivering from one to a multitude of the munitions.

**Software** See Computer Software.

**Software Development Plan (SDP)** A management plan usually generated by the developer outlining the software development effort.

**Software Domain** A distinct functional area that can be supported by a class of software systems with similar requirements and capabilities. A domain may exist before there are software systems to support it.

**Software Failure** The inability, due to a fault in the software, to perform an intended logical operation in the presence of the specified/data environment.

**Software-intensive System** A system in which software represents the largest segment in one or more of the following criteria: system development cost, system development risk, system functionality, or development time.

**Software Logistics** See Software Support.

**Software Maintainability** The probability that the software can be retained in or restored to a specified status in a prescribed period compatible with mission requirements.

**Software Reliability** The probability that the required software will perform the intended logical operations for the prescribed mission(s) and periods(s) in the specified data/environment, without failure.

**Software Reuse** The process of implementing or updating software systems using existing software assets.

**Software Support** The sum of all activities that take place to ensure that implemented and fielded software continues to fully support the operational mission of the system. Software support includes predeployment software support and postdeployment software support (PDSS).

**Soldier-Machine Interface (SMI)** System analysis and examination of psychophysiology of equipment designs and operational concepts to ensure they are compatible with capabilities and limitations of operators and maintainers. (See Man-Machine Interface.)

**Sole Source Acquisition** A contract for the purchase of supplies or services that is entered into or proposed to be entered into by an agency after soliciting and negotiating with only one source.

**Solicitation** In contracting, the term means to go out to prospective bidders and request their response to a proposal.

**Source Selection** The process wherein the requirements, facts, recommendations, and government policy relevant to an award decision in a competitive procurement of a system/project are examined and the decision made.

**Source Selection Advisory Council (SSAC)** Senior military or government civilian personnel designated by the Source Selection Authority (SSA) to serve as staff and advisors during the source selection process. The SSA usually delegates the following duties to the SSAC—selecting/approving the source selection evaluation board (SSEB) membership, reviewing the evaluation criteria, and weighing these criteria.

**Source Selection Authority (SSA)** The official designated to direct the source selection process, approve the selection plan, select the source(s), and announce contract award.

**Source Selection Evaluation Board (SSEB)** A group of military and/or government civilian personnel, represents functional and technical disciplines. The board is charged with evaluating proposals and developing summary facts and findings during source selection.

**Source Selection Plan (SSP)** Proper planning in source selection is essential to assure fairness and timely selection of the most realistic proposal. Preliminary planning activities include preparation of the acquisition plan, draft request for proposal (RFP), and formal RFP, as well as the SSP. The SSP is written by the program office and approved by the source selection authority (SSA). Typically, the SSP consists of two parts. The first part describes the organization and responsibilities of the source selection team. The second part identifies the evaluation criteria and detailed procedures for proposal evaluation.

**Spare Parts** Repairable components or assemblies used for maintenance replacement purposes in major end items of equipment.

**Spares** A term used to denote both spare and repair parts.

**Spares Acquisition Integrated with Production (SAIP)** A procedure used to combine procurement of selected spares with procurement of identical items produced for installation on the primary system, subsystem, or equipment.

**Spares Management Improvement Program (SMIP)** Reforms, breakout, and other initiatives designed to result in savings or cost avoidance in spare parts management.

**Special Access Program (SAP)** Programs established to provide extra security protection for certain highly sensitive technologies. Includes areas such as antisubmarine warfare, low observables, electronic combat, among others, or the application of these technologies to specific weapon systems.

**Special Test Equipment (STE)** Single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing.

**Special Time Allowance** A temporary time value applying to an operation in addition to or in place of a standard allowance in order to compensate for a specified, temporary, nonstandard production condition.

**Special Tooling (ST)** All jigs, dies, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids, and replacements thereof, which are of specialized nature that, without substantial modification or alteration, their use is limited to the development or production of particular services.

**Specialization** An agreement within an alliance wherein a member or group of members most suited by virtue of technical skills, location, or other qualifications assume(s) greater responsibility for a specific task or significant portion thereof for one or more members.

**Specification** A document used in development and procurement which describes the technical requirements for items, materials, and services including the procedures by which it will be determined that the requirements have been met. Specifications may be unique to a specific program (program-peculiar) or they may be common to several applications (general in nature).

**Spending Committees** Standing committees of the House and Senate with jurisdiction over legislation that permits the obligation of funds. For most programs, the Appropriations Committees are spending committees. For some programs, authorization legislation permits the obligation of funds without an appropriation, and so the authorization committees have the spending power. At times, revenue-raising committees (House Ways and Means, and Senate Finance) may also be considered to be spending committees because they write/modify legislation covering "entitlements", that is, legislation which mandates expenditures (spending) of tax revenues on entitlement programs such Social Security.

**Sponsor** The office within Pentagon headquarters with cognizance over mission/warfare area, appropriations, or program. (Navy)

**Staffing** A statement of authorized personnel strength in a program office.

**Stand Alone** A system which performs its functions requiring little or no assistance from interfacing systems.

**Standard** In work measurement, any established or accepted rule, model, or criterion against which comparisons are made.

**Standard Cost** The normal expected cost of an operation, process, or product including labor, material, and overhead charges, computed on the basis of past performance costs, estimates, or work measurement.

**Standard Data** Data that has been approved formally in accordance with the organization's data standardization procedures

**Standard Deviation** The square root of the variance is the standard deviation; a measure of spread of data points about the mean.

**Standard Error of Estimate** A measure of divergence in the actual values of the dependent variable from their regression estimates. (Also known as standard deviation from regression line.) The deviations of observations from the regression line are squared, summed, and divided by the number of observations.

**Standard Industrial Classification (SIC)** Code An industrial classification method used to report price index changes. A code number is assigned to specific industry groups.

**Standard Time Data** A compilation of all the elements that are used for performing a given class of work with standard elemental time values for each element. The data are used as a basis for determining time standards on work similar to that from which the data were determined without making actual time studies.

**Standardization** The process by which DoD achieves the closest practicable cooperation among forces; the most efficient use of research, development, and production resources; and agreement to adopt on the broadest possible basis the use of common or compatible operational, administrative, and logistics procedures and criteria; common or compatible technical procedures and criteria; common or compatible, or interchangeable supplies, components, weapons, or equipment; and common or compatible tactical doctrine with corresponding organizational compatibility.

**Standardization Agreement** The record of an agreement among several or all the NATO member nations to adopt like or similar military equipment, ammunition, supplies and store; and operational, logistic, and administrative procedures. National acceptance of a NATO allied publication issued by the Military Agency for Standardization may be recorded as a Standardization Agreement (STANAG).

**Standardization** (**NATO**) The process by which NATO nations achieve the closest practicable cooperation among their forces; facilitate the most efficient use of research, development, and production resources; and agree to adopt on the broadest possible basis the use of common or compatible operational, administrative, and logistic procedures, common, compatible or interchangeable supplies, components, weapons or equipment, common or compatible technical procedures and criteria, and common or compatible tactical doctrine with corresponding organizational compatibility.

**Statement of Objectives (SOO)** That portion of a contract which establishes a broad description of the government's required performance objectives.

**Statement of Work (SOW)** That portion of a contract which establishes and defines all nonspecification requirements for contractors efforts either directly or with the use of specific cited documents.

**State of the Art** The level to which technology and science at any designated cutoff time have been developed in a given industry or group of industries, as in "the missile's capabilities were determined by the state of the art at the time it went into production."

**Statistical Process Control (SPC)** The use of statistical techniques such as control charts to analyze a process or its outputs so as to take appropriate actions to achieve and maintain a state of statistical control and to improve the process capability.

**Strawman** A working draft copy circulated for comments or suggested changes.

**Streamlining** 1. An acquisition strategy communicating what is required in functional terms at the onset of program definition and risk reduction (PDRR) phase. Allows flexibility for application of contractor's expertise, judgment and creativity in meeting requirements. Ensures only cost-effective requirements are included in solicitation and contracts. 2. Broadly used to denote efforts to shorten acquisition process.

**Stretch Out (a program)** Procurement 1. Buying the originally intended number of end items (or close to it) over a longer period of time (e.g., 10 per year rather than 20). 2. For the acquisition phase, taking longer to complete than originally planned, for technical or funding reasons.

**Structure** Involves the ways in which the tasks of the organization are divided (differentiated) and coordinated (integrated).

**Subassembly** Two or more parts joined together to form a unit, capable of disassembly, which is only a part of a complete machine, structure, or other article.

**Subcontract** A contract or contractual action entered into by a prime contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services under a prime contract.

**Subcontractor** A contractor who enters into a contract with a prime contractor.

**Subprogram** A major functional subset of a program, such as the attitude control system software.

**Subsystem** A functional grouping of components that combine to perform a major function within an element such as electrical power, attitude control, and propulsion.

**Sunk Costs** Costs already incurred. Because they are in the past, they are not germane to decisions about the future use of resources.

**Supplemental Agreement** Bilateral written modification to a contract by which the government and the contractor settle price and/or performance adjustments to the basic contract.

**Supplemental Appropriation** An appropriation enacted as an addition to a regular annual appropriation act. Supplemental appropriations provide additional budget authority (BA) beyond original estimates for programs or activities which are too urgent to be postponed until the next regular appropriation.

**Supplementation** The publication of directives, instructions, regulations, and related documents that add to, restrict, or otherwise modify the policies or procedures of a higher authority.

**Supplies** All property except land or interest in land. Includes, but is not limited to, public works, facilities, ships, aircraft, machine tools, and their parts and accessories.

**Supply** The procurement, distribution, maintenance while in storage, and salvage of supplies, including the determination of kind and quantity of supplies. Producer Phase-extends from determination of procurement schedules to acceptance of finished supplies by the military Services. Consumer Phase-extends from receipt of finished supplies by the military services through issue for use or consumption.

**Supply Support** The process conducted to determine, acquire, catalog, receive, store, transfer, issue, and dispose of secondary items necessary for the support of end items and support items. This includes provisioning for initial support as well as replenishment supply support. One of the traditional logistic support (LS) elements.

**Supply System** The organizations, offices, facilities, methods, and techniques utilized to provide supplies and equipment to authorized users including requirements computation, procurement, distribution, maintenance-in-storage, issue, and salvage of materiel.

**Supportability** The degree of ease to which system design characteristics and planned logistics resources, including the logistic support (LS) elements, allows for the meeting of system availability and wartime utilization requirements.

**Supportability Analysis (SA)** An analytical tool, conducted as part of the Systems Engineering (SE) process, to determine how to most cost-effectively support the system over its entire life cycle. It provides the basis for related design requirements that may be included in specifications.

**Support Equipment** All equipment (mobile or fixed) required to support the operation and maintenance of a materiel system. This includes associated multi-use support items, ground-handling and maintenance equipment, tools, meteorology and calibration equipment, and manual/automatic test equipment. It includes the acquisition of logistics support (LS) for the support equipment itself. One of the traditional LS elements.

**Supporting Service** A Service designated by the Secretary of Defense (SECDEF), or as the result of service initiatives, to assist the designated lead Service in the management of multiservice Operational Test and Evaluation (OT&E) or Joint Test and Evaluation (JT&E) program.

**Support Item** An item which is used to support an end item (e.g., a tool, a piece of test equipment or a training device).

**Surge** An increase in the production or repair of defense goods for a limited duration of time.

**Surge Production** An increased rate of production necessary to meet demands for defense items due to a wartime or mobilization situation. This increased rate can be obtained by having excess production capacity available or by utilizing multiple shifts of normal capacity machines.

**Surveillance Monitor** The individual in the Contract Administrative Office (CAO) who is responsible for coordinating earned value management system criteria surveillance functions with other members of the CAO organization and with the auditor, to assure that the surveillance objectives are accomplished.

**Surveillance** (**Plant**) Monitoring of contractor efforts to perform under a contract. Done by government personnel, that includes on-site inspections, checks, and reports.

**Survivability** The capability of a system and its crew to avoid or withstand a man-made hostile environment without suffering an abortive impairment of its ability to accomplish its designated mission.

**Susceptibility** The degree to which a device, equipment, or weapon system is open to effective attack due to one or more inherent weaknesses. Susceptibility is a function of operational tactics, countermeasures, probability of enemy fielding a threat, etc. Susceptibility is considered a subset of survivability.

**Sustainability** The "staying power" of U.S. forces, units, weapons systems, and equipment usually measured in number of days capability to sustain combat.

**System** 1. The organization of hardware, software, material, facilities, personnel, data, and services needed to perform a designated function with specified results, such as the gathering of specified data, its processing, and delivery to users. 2. A combination of two

or more interrelated equipment's (sets) arranged in a functional package to perform an operational function or to satisfy a requirement.

**System Acquisition Management** See Acquisition Management and Program Management

**System Acquisition Process** The sequence of acquisition activities starting from the agency's reconciliation of its mission needs, with its capabilities, priorities and resources, and extending through the introduction of a system into operational use of the otherwise successful achievement of program objectives.

**System Analysis** A management planning technique which applies scientific methods of many disciplines to major problems or decisions. The list of disciplines includes, but is not limited to, traditional military planning, economics, political science and social sciences, applied mathematics, and the physical sciences.

**System Deployment** Delivery of the completed production system to the using activity.

**System Design Concept** An idea expressed in terms of general performance, capabilities, and characteristics of hardware and software oriented either to operate or to be operated as an integral whole in meeting a mission need.

**System Engineering Management Plan (SEMP)** Includes plans for verification, risk alleviation, analyses, and simulation of the system requirements.

**System Functional Review (SFR)** Conducted to demonstrate achievability of system requirements and readiness to initiate preliminary design. Typically accomplished during the program definition and risk reduction (PDRR) phase.

**System of Systems** Several independent programs which, when integrated together, form a system to meet the needs of a broad mission area such as missile defense. The performance of the individual component programs making up the system of systems is specified in the respective program ORDs; the overarching requirements for the system of systems is contained in a CRD. (See Capstone Requirements Document)

**System Operational Concept** A formal document that describes the intended purpose, employment, deployment, and support of a system.

**System Program Office (SPO)** The office of the program manager (PM) and the single point of contact (POC) with industry, government agencies, and other activities participating in the system acquisition process. (AF)

**System Readiness Objective** A criterion for assessing the ability of a system to undertake and sustain a specified set of missions at planned peacetime and wartime utilization rates. System readiness measures take explicit account of the effects of reliability and

maintainability (R&M) system design, the characteristics and performance of the support system, and the quantity and location of support resources. Examples of system readiness measures are combat sortic rate over time, peacetime mission capable rate, operational availability, and asset ready rate.

**System Reliability and Maintainability Parameter** A measure of reliability or maintainability in which the units of measurement are directly related to operational readiness, mission success, maintenance manpower cost, or logistic support cost.

**System Requirements Review (SRR)** Conducted to ascertain progress in defining system technical requirements. Determines the direction and progress of the systems engineering effort and the degree of convergence upon a balanced and complete configuration. Normally held during the concept and exploration (CE) phase, but may be repeated after the start of program definition and risk reduction (PDRR) to clarify the contractor's understanding of redefined/new user requirements.

**System Safety** The application of engineering and management principles, criteria, and techniques to optimize safety within the constraints of operational effectiveness, time, and cost throughout all phases of the system life cycle.

**System Specification** States all necessary functional requirements of a system in terms of technical performance and mission requirements, including test provisions to assure that all requirements are achieved. Essential physical constraints are included. System specifications state the technical and mission requirements of the system as an entity.

Systems Commands 1. Navy materiel/developing activities: Naval Air Systems Command (NAVAIR), Naval Sea Systems Command (NAVSEA), Naval Facilities Engineering Command (NAVFAC), Naval Supply Command (NAVSUP), Space and Naval Warfare Systems Command (SPAWAR) and Marine Corps Systems Command (MARCORSYSCOM), a reporting activity under the Marine Corps Materiel Command (MARCORMATCOM). 2. Term is sometimes used as a generic reference for all service acquisition commands/centers.

**Systems Effectiveness** The measure of the extent to which a system may be expected to achieve a set of specific mission requirements. It is a function of availability, reliability, dependability, and capability.

**Systems Engineering** A comprehensive, iterative technical management process that includes translating operational requirements into configured systems, integrating the technical inputs of the entire design team, managing interfaces, characterizing and managing technical risk, transitioning technology from the technology base into program specific efforts, and verifying that designs meet operational needs. It is a life cycle activity that demands a concurrent approach to both product and process development.

**System/Subsystem Specification** (SSS) States the system requirements, interfaces, adaptation requirements, security and privacy requirements, computer resource requirements, design constraints (software architecture, data standards, programming language), software support and precedence requirements for a software development project. For an AIS, the SSS represents the functional baseline and is analogous to the System Specification for a non-AIS program. In a non-AIS program, the SSS does not represent the functional baseline, but a lower level in the WBS.

**System Threat Assessment (STA)** Describes the threat to be countered and the projected threat environment. The threat information must be validated by the Defense Intelligence Agency (DIA) for programs reviewed by the Defense Acquisition Board (DAB).

**System Verification Review (SVR** Conducted to ensure that performance requirements of the system specification have been met. Demonstrates that the system satisfies the requirements in the functional and allocated baselines, confirms the completion of all incremental accomplishments for system verification (e.g. FCAs for CIs), and confirms readiness for production. Normally conducted late in the Engineering and Manufacturing Development phase.

## T

**Tailoring** The manner in which certain core issues (program definition, program structure, program design, program assessments, and periodic reporting) are addressed in a particular program. The milestone decision authority (MDA) seeks to minimize the time it takes to satisfy an identified need consistent with common sense, sound business management practice, applicable laws and regulations, and the time sensitive nature of the requirement itself. Tailoring may be applied to various aspects of the acquisition process, including program documentation, acquisition phases, the time and scope of decision reviews, supportability analysis, and decisions levels consistent with all applicable statutory requirements.

**Tailoring (Joint Program)** The process of evaluating potential requirements of the participating services to determine their pertinence and cost effectiveness for a specific system or equipment joint acquisition, and modifying these requirements to ensure that each contributes to an optimal balance between the needs of the participating services and cost.

**Teaming** An agreement of two or more firms to form a partnership or joint venture to act as a potential prime contractor; or an agreement by a potential prime contractor to act as a subcontractor under a specified acquisition program; or an agreement for a joint proposal resulting from a normal prime contractor-subcontractor, licensee-licenser, or leader company relationship.

**Technical Architecture Framework for Information Management (TAFIM)** See C4ISR Architecture Framework.

**Technical Data (TD)** Scientific or technical information recorded in any form or medium (such as manuals and drawings) necessary to operate and maintain a defense system. Documentation of computer programs and related software are technical data. Computer programs and related software are not technical data. Also excluded are financial data or other information related to contract administration. One of the traditional elements of logistic support (LS).

**Technical Data Package (TDP)** A technical description of an item adequate for supporting an acquisition strategy, production, engineering, and logistics support (LS). The description defines the required design configuration and procedures to ensure adequacy of item performance. It consists of all applicable technical data such as drawings, associated lists, specifications, standards, performance requirements, quality assurance provisions, and packaging details. One of the traditional LS elements.

**Technical Data Rights** See Rights in Technical Data.

**Technical Evaluation** The study, investigations, or test and evaluation (T&E) by a developing agency to determine the technical suitability of materiel, equipment, or a system, for use in the military services. (See Development Test and Evaluation (DT&E).)

**Technical Information** Information including scientific, which relates to research, development, engineering, test, evaluation, production, operation, use and maintenance of munitions, and other military supplies and equipment.

**Technical Management (TM)** Technical management is a broad term including the management of a totally integrated effort of system engineering (including hardware and software), test and evaluation (T&E), and production and logistics support over the system life cycle. Its goal is timely deployment of an effective system, sustaining it, and satisfying the need at an affordable cost. TM includes, but is not limited to system/product definition process (establishing baseline); design engineering; systems engineering (SE) (putting pieces together); computer resources; software management; development T&E (DT&E); operational T&E (OT&E); reliability, availability and maintainability (RAM); product improvements (PIs); transition from development to production; total quality management (TQM); standardization and specifications; configuration management (CM); producibility; manufacturing process and controls; system or product disposal; and preplanned product improvements (P3I). TM involves balancing a system's cost, schedule, effectiveness, and supportability.

**Technical Management Plan (TMP)** A contractor's plan for the conduct and management of the effort required to satisfy the requirements in the request for proposal (RFP), contract schedule, statement of work/objectives (SOW/SOO), and/or specification.

**Technical Manual (TM)** A publication that contains instructions for the installation, operation, maintenance, training, and support of weapon systems, weapon system components, and support equipment. TM information may be presented in any form or characteristic, including but not limited to hard copy, audio and visual displays, magnetic tape, discs, and other electronic devices. A TM normally includes operational and maintenance instructions, parts lists or parts breakdown, and related technical information or procedures exclusive of administrative procedures technical orders (TOs) that meet the criteria of this definition may also be classified as TM.

**Technical Performance Measurement (TPM)** Describes all the activities undertaken by the government to obtain design status beyond that treating schedule and cost. A TPM manager is defined as the product design assessment which estimates, through tests the values of essential performance parameters of the current design of work breakdown structure (WBS) product elements. It forecasts the values to be achieved through the planned technical program effort, measures differences between achieved values and those allocated to the product element by the system engineering process, and determines the impact of these differences on system effectiveness.

**Technical Risk** The risk that arises from activities related to technology, design and engineering, manufacturing, and the critical technical processes of test, production, and logistics.

**Technology Base** The development efforts in basic and applied research.

**Technology Modernization** The coupling of modernization with the implementation of advanced manufacturing technology by providing incentives for contractor (and subcontractor) capitalization.

**Test** Any program or procedure which is designed to obtain, verify, or provide data for the evaluation of research and development (R&D) (other than laboratory experiments); progress in accomplishing development objectives; or performance and operational capability of systems, subsystems, components, and equipment items.

**Test and Evaluation (T&E)** Process by which a system or components provide information regarding risk and risk mitigation and empirical data to validate models and simulations. T&E permit, as assessment of the attainment of technical performance, specifications and system maturity to determine whether systems are operationally effective, suitable and survivable for intended use. There are two types of T&E—Developmental (DT&E) and Operational (OT&E). (See Operational Test and Evaluation (OTE&E), Initial Operational Test and Evaluation (IOT&E), and Developmental Test and Evaluation (DT&E).)

**Test and Evaluation Master Plan (TEMP)** Documents the overall structure and objectives of the test and evaluation (T&E) program. It provides a framework within which to generate detailed T&E plans and it documents schedule and resource implica-

tions associated with the T&E program. The TEMP identifies the necessary developmental test and evaluation (DT&E), operational test and evaluation (OT&E) and live fire test and evaluation (LFT&E) activities. It relates program schedule, test management strategy and structure, and required resources to: critical operational issues (COIs); critical technical parameters; objectives and thresholds documented in the Operational Requirements Document (ORD); evaluation criteria; and (5) milestone decision points. For multiservice or joint programs, a single integrated TEMP is required. Component-unique content requirements, particularly evaluation criteria associated with COIs, can be addressed in a component-prepared annex to the basic TEMP. (See Capstone TEMP).)

**Testbed** A system representation consisting of actual hardware and/or software and computer models or prototype hardware and/or software.

**Test Criteria** Standards by which test results and outcome are judged.

**Test Integration Working (TWIG)/Test Planning Work Group** An integrated product team (IPT) that facilitates the integration of test requirements through close coordination between material developer, combat developer, logistician, and developmental and operational testers in order to minimize development time and cost and preclude duplication between developmental and operational testing. This team produces the test and evaluation master plan (TEMP) for the program manager (PM).

**Tester** The agency responsible for the developmental testing (DT) or operational testing (OT) of systems or components.

**Testing** An element of inspection. Generally denotes the determination by technical means of the properties or elements of supplies, or components thereof, including functional operation, and involves the application of established scientific principles and procedures.

**Test Report** Formally documents the results, conclusions, and recommendations as a result of each phase of development testing (DT)/operational testing (OT).

**Then-Year Dollars** See Current-Year Dollars or Escalated Dollars.

**Theory of Constraints** A factory scheduling and inventory control philosophy developed by Dr. Eli Goldratt which aims to improve factory flow and reduce inventory levels by recognizing the probabilistic nature of interdependent work stations.

**Threat** The sum of the potential strengths, capabilities, and strategic objectives of any adversary that can limit or negate U.S. mission accomplishment or reduce force, system, or equipment effectiveness.

**Threshold** The minimum acceptable value which, in the user's judgment, is necessary to satisfy the need. If threshold values are not achieved, program performance is seriously

degraded, the program may be too costly, or the program may no longer be timely. If the threshold values are not otherwise specified, the threshold value for performance shall be the same as the objective value, the threshold value for schedule shall be the objective value plus six months for ACAT I and three months for ACAT IA programs, and the threshold value for cost shall be the objective value plus 10 percent.

**Tiering** Formerly, specifications and standards referenced in a contract which within themselves reference other documents which reference still more documents, etc. This practice was formally stopped by the Secretary of Defense (SECDEF) in a 1994 memorandum.

**Time Line** A schedule line showing key dates and planned events.

**Time Phased Action Plan** The time phased action plan represents the schedule for the employment of the manufacturing facilities, processes, and personnel necessary to meet the end item delivery date.

**Time Study** The procedure by which the actual elapsed time for performing an operation or subdivisions, or elements thereof is determined by the use of a suitable timing device and recorded.

**Tolerance** A measure of the accuracy of the dimensions of a part, or the electrical characteristics of an assembly or function.

**Tooling Costs** Costs incurred by the contractor in establishing certain functions of the manufacturing process to produce an end item.

**Top Line** Fiscal guidance promulgated for programming purposes—the maximum dollar amount the DoD, the services, or other activities can expect to receive. Represents core plus marginal programs.

**Total Allocated Budget** The sum of all budgets allocated to the contract. Total allocated budget consists of the performance measurement baseline and all management reserve.

**Total Asset Visibility (TAV)** The ability to gather information at any time about the quantity, location, and condition of assets anywhere in the DoD logistics system.

**Total Obligation Authority (TOA)** A DoD financial term which expresses the value of the direct program for a given fiscal year (FY). It is based on the Congressionally approved budget authority (BA) for the program, plus or minus financing and receipts or other adjustments.

**Total Ownership Cost** An emerging concept designed to determine the true cost of design, development, ownership and support of DoD weapons systems. At the DoD level, Total Ownership Cost is comprised of the costs to research, develop, acquire, own,

operate and dispose of defense systems, other equipment and real property, the costs to recruit, retain, separate, and otherwise support military and civilian personnel, and all other costs of the business operations of the DoD. At the individual program level, Total Ownership Cost is synonymous with the life cycle cost of the system.

**Total Quality Management (TQM)** A management philosophy committed to a focus on continuous improvements of product and services with the involvement of the entire workforce.

**Total Risk Assessing Cost Estimate (TRACE)** A management system based on scientific methods, set procedures, and effective controls used in the development of research, development, test, and evaluation (RDT&E) program and budget requirements to arrive at cost estimates that more closely approach the eventual actual system costs.

**Touch Labor** Defined as production labor which can be reasonably and consistently related directly to a unit of work being manufactured, processed, or tested. Hands-on labor effort.

**Trade-Off** Selection among alternatives to obtain optimum balance for a system. Often the decision is made to opt for less of one parameter (i.e., fully funded) program.

**Training** The level of learning required to adequately perform the responsibilities designated to the function and accomplish the mission assigned to the system.

**Training and Doctrine Command (TRADOC) System Manager (TSM)** An individual in TRADOC responsible for coordinating the combat developer, user and trainer efforts in the life cycle management of the assigned system, and for doctrinal and organizational standardization or interoperability with NATO allies.

**Training and Training Support** The processes, procedures, techniques, training devices, and equipment used to train civilian and active duty and reserve military personnel to operate and support a materiel system. This includes individual and crew training; new equipment training; initial, formal, and on-the-job training; and logistic support (LS) planning for training equipment and training device acquisitions and installations. A traditional element of LS.

**Transition to Production** The period during which the program shifts (passes) from development to production. It is not an exact point, but is a process consisting of disciplined engineering and logistics management to ensure the system is ready for manufacture.

**Transportability** The capability of materiel to be moved by towing, self-propulsion, or carrier through any means, such as railways, highways, waterways, pipelines, oceans, and airways. (Full consideration of available and projected transportation assets, mobility

plans and schedules, and the impact of system equipment and support items on the strategic mobility of operating military forces is required to achieve this capability.)

**Trigger Based Item Management (TBIM)** Management approach which relies on predetermined indicators ("triggers") to inform management of the need to take corrective action prior to a situation deteriorating to a crisis point.

**Turn Around Time** Time required to return an item to use between missions or after removed from use.

**Two-Step Sealed Bids** A method of procurement that combines competitive procedures in order to obtain the benefits of sealed bidding when adequate specifications are not available. In step one, firms are allowed to submit technical (not price) proposals to satisfy a requirement. In step two, each firm with a satisfactory technical approach is then allowed to submit a sealed bid (price) which uses that firm's approach as the contract specification. Award goes to the low responsive and responsible bidder. Formerly called Two-Step Formal Advertising.

**Two-Way Street** Philosophy encouraging U.S. to buy arms from, in addition to selling arms to, NATO and other friendly nations.

**Two-Year Budget** Beginning with the President's budget submitted in January 1987, the DoD portion was for a two-year period (FY88/89). The intent was for the Congress to authorize and appropriate for DoD for a two-year period, providing program stability among other positive effects. This was requested by Congress on behalf of DoD. The even years (1986, etc.) are "on-years," the odd ones "off-years." To date, DoD has not received a two year appropriation.

**Type Classification (TC)** Process which identifies the life cycle status of a materiel system after a production decision by the assignment of a type classification designation, and records the status of a materiel system as a guide to procurement, authorization, logistical support, asset, and readiness reporting. Satisfies DoD requirement to designate when a system is approved for service use. (Army)

## IJ

**Unavoidable Delay** A production delay the operator cannot prevent.

**Uncertainty** A condition, event, outcome, or circumstance of which the extent, value, or consequence is not predictable. State of knowledge about outcomes in a decision which are such that it is not possible to assign probabilities in advance. Some techniques for coping with this problem are *a fortiori* analysis (making use of conclusions inferred from another reasoned conclusion or recognized fact), contingency analysis, and sensitivity analysis.

**Undefinitized Contractual Action** New procurement action entered into by the government for which contractual terms, specifications, or price are not agreed upon before performance is begun (letter contract or change order). Letter contract and change order await negotiations to definitize prices.

**Undelivered Orders** An undelivered order is any document, meeting the criteria of an obligation, issued for material or services that has not as yet been received by the activity that ordered it. Includes material requisitions applicable to reimbursable orders issued for material requisitions applicable to reimbursable orders issued for material to be delivered from a stock funded inventory, and purchase orders issued which cite annual appropriations.

Under Secretary of Defense (Acquisition and Technology) (USD(A&T)) The USD(A&T) has policy and procedural authority for the defense acquisition system, is the principal acquisition official of the Department, and is the acquisition advisor to the Secretary of Defense (SECDEF). In this capacity the USD(A&T) serves as the Defense Acquisition Executive (DAE), the Defense Senior Procurement Executive, and the National Armaments Director, the last regarding matters of the North Atlantic Treaty Organization (NATO). For acquisition matters, the USD(A&T) takes precedence over the Secretaries of the Services after the SECDEF and Deputy SECDEF. The USD(A&T) authority ranges from directing the Services and Defense Agencies on acquisition matters, to establishing the DoD Federal Acquisition Regulation Supplement (DFARS), and chairing the Defense Acquisition Board (DAB) for major defense acquisition program (MDAP) reviews.

Under Secretary of Defense (Acquisition and Technology) (USD(A&T)); Office of the Under Secretary of Defense (Acquisition and Technology) (OUSD(A&T)) The OUSD(A&T), is organized around services, research and development (R&D), and materiel acquisition. Several organizational elements report directly to the USD(A&T): Principal Deputy USD (DUSD)(A&T); Director, Defense Research and Engineering; DUSD (International and Commercial Programs); DUSD (Industrial Affairs & Installations); DUSD (Environmental Security); DUSD (Logistics); DUSD (Acquisition Reform); Director, Ballistic Missile Defense Organization; and Director, Defense Logistics Agency. Reporting into staff elements within OUSD(A&T) are a number of other Defense Agencies.

**Undistributed Budget** Budget applicable to contract effort which has not yet been distributed to the cost accounts.

**Unexpended Balance** The amount of budget authority previously granted to an agency but still unspent and available for future payments.

**Unfilled Order** An unfilled order is any document issued for goods or services, which meet the criteria of an obligation, yet has not been received.

**Uniform Procurement System (UPS)** An interagency group of senior procurement officials, known as the Council on the Uniform Procurement System, chaired by the Administrator, Office of Federal Procurement Policy (OFPP).

**Unit Cost Curve** A plot of the cost of each unit of a given quantity. The total cost for the given quantity in the sum of the cost of each individual unit.

**United States Code (U.S.C.)** A consolidation and codification of the general and permanent laws of the United States arranged according to subject matter under 50 title headings, in alphabetical order to a large degree. Sets out the current status of the laws, as amended. Title 10 governs the Armed Forces.

**Unknown-Unknowns** (**UNK**(**s**)) Future situation impossible to plan, predict, or even know what to look for.

**Unlimited Rights** Rights to use, modify, reproduce, display, release, or disclose technical data (TD) in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

**Unobligated Balance** The amount of budget authority, previously granted to an agency but not vet committed, that continues to be available for commitment in the future.

**Unplanned Stimuli** Thermal, impact, or shock inputs which munitions are designed to withstand.

**Unscheduled Maintenance** Corrective maintenance required by item conditions.

**Unsolicited Proposal** A written proposal that is submitted to an agency or the submitter's initiative for the purpose of obtaining a contract with the government, and which is not in response to a formal or informal request.

**Up Front** See Front End.

**User** An operational command or agency that receives or will receive benefit from the acquired system. Commanders-in-Chief (CINCs) and the Services are the users. There may be more than one user for a system. The Services are seen as users for systems required to organize, equip, and train forces for the CINCs of the unified command.

**User Friendly** Primarily a term used in automated date processing (ADP), it connotes a machine (hardware) or program (software) that are compatible with a person's ability to operate them successfully and easily.

**User Representatives** A command or agency that has been formally designated by proper authority to represent single or multiple users in the requirements and acquisition process.

The Services and the Service components of the Commanders-in-Chief (CINCs) are normally the user representative. There should be only one user representative for a system.

**Utility** The state or quality of being useful militarily or operationally. Designed for or possessing a number of useful or practical purposes rather than a single, specialized one.



**Validation** 1. The process by which the contractor (or as otherwise directed by the DoD component procuring activity) tests a publication/technical manual (TM) for technical accuracy and adequacy. 2. The procedure of comparing input and output against an edited file and evaluating the result of the comparison by means of a decision table established as a standard.

Value Engineering (VE) Value engineering is a functional analysis methodology that identifies and selects the best value alternative for designs, materials, processes, systems, and program documentation. VE applies to hardware and software; development, production, and manufacturing; specifications, standards, contract requirements, and other acquisition program documentation; facilities design and construction; and management or organizational systems and processes to improve the resulting product.

**Value Engineering Change Proposal (VECP)** Submitted by the contractor for review as to its value engineering (VE) applicability. If accepted by the government, normally the contractor is compensated for saving the government money.

**Variable Cost (VC)** A cost that changes with the production quantity or the performance of services. This contrasts with fixed costs that do not change with production quantity or services performed.

**Variance** (**Statistical**) A measure of the degree of spread among a set of values; a measure of the tendency of individual values to vary from the mean value. It is computed by subtracting the mean value from each value, squaring each of these differences, summing these results, and dividing this sum by the number of values in order to obtain the arithmetic mean of these squares.

Variance (Earned Value) See Cost Variance and Schedule Variance

**Vendor** An individual, partnership, corporation, or other activity which sells property to the military establishment. A vendor may supply a government contractor.

**Vulnerability** The characteristics of a system that cause it to suffer a definite degradation (loss or reduction of capability to perform the designated mission) as a result of having

been subjected to a certain (defined) level of effects in an unnatural (man-made) hostile environment. Vulnerability is considered a subset of survivability.

## $\mathbf{W}$

**Waiver** 1. Specifications. A written authorization to accept a configuration item (CI) or other designated item, which, during production, or after having been submitted for inspection, is found to depart from specified requirements, but nevertheless is considered suitable "as is" or after rework by an approved method. 2. Decision to not require certain criteria to be met for certain reasons, such as national security.

**Warrant** 1. An official document issued by the Secretary of the Treasury and countersigned by the Comptroller General of the United States by which monies are authorized to be withdrawn from the Treasury. Warrants are issued after appropriations and similar congressional authority have been enacted. 2. An official document designating an individual as a contracting officer. The warrant will state as reference the limits of the contracting officer's authority.

**Warranty** A promise or affirmation given by a contractor to the Government regarding the nature, usefulness, or condition of the supplies or performance of services furnished under a contract.

**Weapon System** Items that can be used directly by the armed forces to carry out combat missions.

**Weighted Guidelines** A government technique for developing fee and profit negotiation objectives, within percentage ranges established by regulation.

Wholesale Price Index (WPI) A composite index of wholesale prices of a representative group of commodities.

**Win-Win** A philosophy whereby all parties in a defense acquisition scenario come away gaining some or most of what they wanted (i.e., everyone "wins" something, even though it may not be 100 percent of the goal), the ideal outcome.

**Withdrawal** The action taken by a service to remove its resources (personnel and funds) before the program is completed.

**Wooden Round** A round (shell, missile, etc.) requiring no maintenance or preparation time prior to loading for firing.

**Work Aid** A device such as a pattern, template, or sketch used to enhance a worker's ability to learn and perform a task efficiently.

**Workaround** A procedure developed for taking into account shortcomings or other problems in a program and devising workable solutions to get around the problems.

**Work Breakdown Structure (WBS)** An organized method to break down a project into logical subdivisions or subprojects at lower and lower levels of details. It is very useful in organizing a project. See MIL-HDBK 881 for examples of WBSs.

**Work Cycle** A pattern of motions and/or processes that is repeated with negligible variation each time an operation is performed.

**Workload** 1. The amount of work in terms of predetermined work units which organizations or individuals perform or are responsible for performing. 2. A quantitative expression of human tasks, usually identified as standard hours of work or a corresponding number of units.

**Work Measurement (Labor Standards)** A method to determine how long it should take an employee to perform the work and to identify opportunities for improvement.

**Work Package Budgets** Resources which are formally assigned by the contractor to accomplish a work package expressed in dollars, hours, standards, or other definitive units.

**Work Packages** Detailed short-span jobs, or material items, identified by the contractor for accomplishing work required to complete the contract. Characteristics of the work package: it represents units of work at levels where work is performed; it is clearly distinguished from all other work packages; it is assignable to a single organizational element; and it has scheduled start and completion dates, as applicable, interim milestones, all of which are representative of physical accomplishment.

**Work Performed** Includes completed work packages and the completed portion of work packages begun and not yet completed.

**Work Sampling Study** A statistical sampling technique employed to determine the proportion of delays or other classifications of activity present in the total work cycle.

Working-Level Integrated Product Team (WIPT) Team of representatives from all appropriate functional disciplines working together to build successful and balanced programs, identify and resolve issues, and make sound and timely decisions. WIPTs may include members from both government and industry, including program contractors and sub-contractors. A committee, which includes non-government representatives, to provide an industry view, would be an advisory committee covered by Federal Advisory Committee Act (FACA) and must follow the procedures of that Act.

**Worst Case Scenario** In planning, to examine the worst possible environment or outcome and evaluate results around which to formulate next step.

**Worth** The measure of value received for the resources expended. It is directly proportional to the cost to a foe (damage, neutralization, deception, and/or counteraction) and indirectly proportional to the system cost.